

Summary

For the last two decades, the Commission has engaged in major efforts to improve use of the ITFS and MMDS spectrum. The Commission's most recent effort this past summer will make possible the provision of much needed high-speed, two-way broadband services to communities across the country. However, to ensure that these efforts are not wasted in New York City, NY3G Partnership, the co-channel MMDS licensee operating on the F group channels, urges the Commission to modify the interrelated ITFS B and F group licenses of Trans Video Communications, Inc. and restrict TVC's operations to the B group channels. With prompt action on this petition, NY3G will be able to put this spectrum to use, introducing competitive and affordable wireless broadband service to more than fifteen million consumers in the New York City area and providing hundreds of millions of dollars in consumer savings.

At present, NY3G operates an MMDS station, which is authorized to provide only west-facing service from the Empire State Building. NY3G's operations are so constrained because of TVC's use of the B and F group channels which violates the Commission's rule limiting ITFS licensees to four ITFS channels (one channel group) per area of operation. There is no evidence that TVC requested or that the Commission ever granted a waiver of this restriction.

Additionally, TVC uses the F group channels merely to transmit programming simulcast on its main ITFS station, which operates on the B group channels. Such use is inefficient and would not warrant a waiver of the Commission's rule. Moreover, it is unnecessary. TVC applied for and received FCC authorization to move its main ITFS facility to a higher transmit site, thereby eliminating any need for TVC's continued use of the F group channels, as TVC argued as an inducement for grant of that application. In any event, the vast majority, if not all, of TVC's broadcasts can be more efficiently distributed using a variety of alternative

technologies or media, such as online video streaming or PEG access channels. For these reasons and consistent with FCC precedent, the Commission should modify the interrelated ITFS licenses of TVC and restrict TVC's operations to the B group channels.

Table of Contents

Summary	i
Table of Contents	iii
Background	1
Discussion	10
I. TVC's use of the F group channels violates the Commission's rule limiting ITFS licensees to four channels	10
II. TVC's use of the F group channels is inefficient and would not warrant a waiver of the four-channel restriction	11
Conclusion	15

In the Matter of)
)
Trans Video Communications, Inc.)

PETITION TO MODIFY LICENSES

Background

² See *In the Matter of Amendment of Parts 2 and 4 of the Commission Rules and Regulations to Establish a New Class of Educational Television Service for the Transmission of Instructional*

Brooklyn, New York, applied for and received a license to use four B group channels to provide service to the New York City area.³ At that time, the ITFS rules limited licensees to one channel group for any area of operation.⁴

TVC also applied for authorization to use four F group channels to retransmit the programming from its main ITFS facility, KNZ-69, to certain receive sites in the Borough of Queens.⁵ The available evidence indicates that TVC did not submit a waiver request of the ITFS channel restriction with its application.⁶ The Commission granted the application for this facility, KNZ-70, allowing TVC to operate on a total of eight ITFS channels on two channel groups in the same area, in contravention of the limitation.

In November 1966, TVC proposed a second F group transmitter site again to retransmit programming from the B group transmitter to receive sites in the Borough of Brooklyn that,

and Cultural Material to Multiple Receiving Locations on the Channels in the 1990-2100 Mc/S or 2500-2690 Mc/S Frequency Band, 39 FCC 846 (1963).

³ See Attachment A.

⁴ See *In the Matter of Amendment of Parts 2 and 4 of the Commission Rules and Regulations to Establish a New Class of Educational Television Service for the Transmission of Instructional and Cultural Material to Multiple Receiving Locations on the Channels in the 1990-2100 Mc/S or 2500-2690 Mc/S Frequency Band*, 39 FCC 846, at ¶ 23 (1963). In 1964, the Commission revised its band plan, creating seven channel groups, each consisting of four 6-MHz channels, and one channel group, consisting of three 6-MHz channels. See *Amendment of Section 74.902 of the Rules Governing Instructional Television Fixed Stations to Assign Alternative Channels to Stations Operating in the Same Area Instead of Every Sixth Channel*, 2 RR 2d 1615 (1964). In 1966, the FCC conformed its ITFS channel restriction, accordingly. See *Amendment of the Commission's Rules and Application Form Concerning the Instructional Television Fixed Service Section 74.902 and FCC Form 330-P*, 7 RR 2d 1768 (1966).

⁵ TVC's proposed F group transmitter would be 10.9 miles east-northeast of its main ITFS facility operating on the B group channels.

⁶ See Attachment A.

according to TVC, could not receive the signal from either of its already authorized facilities.⁷ Although TVC's applications identified its ownership of its other ITFS facilities in the area, it did not request a waiver of the ITFS channel restriction or indicate that it had previously requested and received such a waiver. The Commission granted the application for the additional F group facility, KVS-31, in January 1968.⁸ The original license for this facility does not indicate that TVC was operating pursuant to a waiver of the ITFS channel restriction.⁹

NY3G Partnership. In 1983, the Commission redesignated the E and F group channels from ITFS to Multichannel Multipoint Distribution Service ("MMDS"),¹⁰ concluding that the public interest would be better served by permitting MMDS operators, rather than ITFS operators, to use those frequencies.¹¹ The Commission stated that it expected grandfathered

⁷ See Application, BPIF-95, FCC Form 330-P, at Section V, p.1 (November 4, 1966) (identifying that the station would serve only as a relay and would "repeat programs of KNZ-69 . . . for reception in schools presently unable to receive service from KNZ-69 or from relay KNZ-70 in Queens.") (emphasis added), attached as Attachment A. TVC proposed to locate the second F group transmitter 4.9 miles northeast of KNZ-69 and 8.2 miles west of KNZ-70. See Attachment A, at Engineering Exhibit p. 3.

⁸ TVC is also the licensee of two other B group facilities in New York, WHR-691 and KZE-20, serving eight and seven registered receive sites, respectively.

⁹ See FCC Form 356 (March 20, 1968), attached in Attachment A.

¹⁰ See *Amendment of Parts 2, 21, 74 and 94 of the Commission's Rules and Regulations in Regard to Frequency Allocation to the Instructional Television Fixed Service, the Multipoint Distribution Service and the Private Operational Fixed Microwave Service*, Report and Order, 94 FCC 2d 1209 (1983) ("*Reallocation Order*"); *aff'd on reconsideration*, Memorandum Opinion and Order on Reconsideration, 98 FCC 2d 129 (1984) ("*Reallocation Order on Reconsideration*"). The Commission grandfathered then-existing ITFS facilities but placed a significant limitation on modifications to those facilities, essentially freezing such operations as of 1983. See *Reallocation Order on Reconsideration*, at ¶ 12.

¹¹ See, e.g., *In the Matter of Trans Video Communications, Inc.*, 19 FCC Rcd 18211, at ¶ 11 (2003).

ITFS licensees to negotiate in good faith with co-channel MMDS permittees and come to an agreement to make channels available for MMDS.¹²

TVC Relocation Application. In 1985, NY3G was chosen as the tentative selectee of the F group channels in New York City and, shortly thereafter, entered into negotiations with TVC to address potential interference concerns and facilitate the deployment of NY3G's service. After approximately a year of negotiations, the parties reached an agreement whereby TVC would lease certain B group channels to NY3G and would cease transmitting on the F group channels.¹³ As a material component of that agreement, TVC would seek FCC authority to relocate its main ITFS facility operating on the B group channels to the Empire State Building ("ESB"),¹⁴ and NY3G would file an application proposing to operate on the F group channels on the ESB using its own facilities.¹⁵

In support of its application to relocate its ITFS facilities, TVC stated that grant of that application would "improve spectrum utilization" because relocation would permit the signal to reach "most receiving locations now dependent for reception upon TVC's transmitters, KNZ-70 and KVS-31, operating on Group F"¹⁶ and, accordingly, would eliminate the need for TVC to

¹² See *Reallocation Order*, at ¶¶ 110, 151.

¹³ See Trans Video Communications, Inc. and Ultravision, Inc., "Channel Coordination and Channel Lease Agreement" (August 6, 1986) ("Relocation Agreement"), attached as Attachment B. Ultravision, Inc. is an affiliate of NY3G.

¹⁴ Application, File No. BMLIF-870429DF, at Engineering Exhibit p. 2 (April 29, 1987) ("Relocation Application"). The relevant sections of the application are attached in Attachment C; see also Relocation Agreement, §§ 1.0, 2.0.

¹⁵ See File No. 5455-CM-P-83 (December 31, 1986).

¹⁶ See Relocation Application, at Engineering Exhibit p. 2.

continue to use the F group channels, freeing up that spectrum for use by NY3G, the co-channel MMDS licensee.¹⁷ NY3G estimates that if TVC's main ITFS facility is relocated to the ESB and operating digitally it will be able to serve all the registered receive sites of its F group transmitter KVS-31 and, with some additional minor modifications, all of the registered receive sites of its F group transmitter KNZ-70.¹⁸

TVC Excess-Capacity Lease Agreement. Several entities with conflicting applications opposed the TVC and NY3G applications, delaying processing of the applications for nearly a decade.¹⁹ Initially, both TVC and NY3G verbally agreed to stay the course and wait for FCC action on the applications, even though after two years either TVC or NY3G could have terminated the agreement.²⁰ While the FCC slowly endeavored to resolve the complex

¹⁷ See Relocation Application, at Engineering Exhibit p. 1 ("These objectives[, expansion of TVC's service area and improvement of spectrum efficiency,] would be accomplished by relocating TVC's station KNZ-69 from its present location in Brooklyn to the [ESB], and by relinquishing TVC's operations on ITFS Group F.") (emphasis added) and at Exhibit I-1 ("Relocating its transmitter to the [ESB] . . . will enable [TVC] to provide better service using the B Channels only."); see also Petition for Leave to Amend and Request for Partial Grant, File No. BMLIF-870429DF (October 27, 1988) ("The purpose of [the application] is to break the Empire State Building (ESB) ITFS and MMDS logjam, and permit the commencement of ITFS service on the B Group Channels and of MMDS service on the F Group Channels.") (emphasis added), attached as Attachment D.

¹⁸ Three of those sites are also post-May 26, 1983 receive sites and are not, in fact, required to be protected under the *Reallocation Order*.

¹⁹ See Letter to Grand MMDS Alliance New York F/P Partnership from Charles E. Dziedzic, Assistant Chief, Video Services Division, Reference No. 1800E6, File No. 5455-CM-P-83, at 4 (May 6, 1997) (summarizing the NY3G application proceeding); Grand Alliance, Informal Comments, File No. BMLIF-870429 (March 14, 1996) (summarizing the TVC Relocation Application proceeding).

²⁰ See Relocation Agreement, §§ 2.0, 17.0 (parties can terminate agreement after two years if FCC applications are not granted).

interference issues between the competing applications, TVC changed its position on releasing the F group channels and refused to renegotiate the terms of the agreement with NY3G, even declining to return phone calls.

In December 1994, TVC executed an excess-capacity lease agreement with a third-party, CAI Wireless, Inc. (“CAI”), covering the B and F group stations at issue here – Nextel Communications, Inc. (“Nextel”) is now the successor in interest of that agreement.²¹ The ten-year lease, with an optional ten-year renewal period, granted CAI a right of first refusal to match any third-party offer regarding the lease of excess capacity; prohibited TVC from negotiating with any third party for the lease of such capacity until nine months before the expiration of the agreement; and stipulated that specific performance of the contract would be an appropriate remedy in the event of breach of contract.²²

Shortly thereafter, TVC filed applications seeking protected service areas (“PSAs”) to protect its lessee’s F group transmissions and to expand its operations on those channels.²³ NY3G opposed the applications arguing, *inter alia*, that grant of those applications would be inconsistent with the reallocation of the E and F group channels to MMDS and the

²¹ See TVC and CAI Wireless Systems, Inc., “Channel Coordination and Excess Channel Capacity Lease Agreement” (December 19, 1994), attached as Attachment E.

²² See *id.* at Sections 1.1 to 2.7, and 21.1.

²³ See File No. BMPLIF-19950728ER (July 28, 1995); see also File No. BMPLIF-950728DB (July 28, 1995).

Commission's 1983 freeze on ITFS operations on those channels.²⁴ The FCC rejected TVC's applications largely for the reasons advanced by NY3G.²⁵

In 1996, NY3G filed Informal Comments urging the Commission to grant the Relocation Application conditioned on TVC's surrender of its F group authorizations, as TVC had originally proposed.²⁶ In 2004, the Division ordered the Licensing and Technical Analysis Branch to grant the Relocation Application but declined to condition that authorization on TVC's withdrawal from the F group channels, stating that TVC's operations do not violate the Commission's Rules.²⁷ The decision did not address TVC's apparent violation of the rules in operating more than four channels in one area or TVC's lease agreement with CAI, which raised significant obstacles to NY3G's ability to negotiate with TVC, in contravention of its obligation to do so.

Further Notice of Proposed Rulemaking. In an order released this past summer, the Commission fundamentally restructured the MMDS/ITFS spectrum, "enhanc[ing] flexibility in order to encourage the highest and best use of spectrum . . . and the growth and rapid deployment

²⁴ See, e.g., Grand Alliance, Reply, File No. BMPLIF-950728ER, at 4-5 (October 31, 1995).

²⁵ See, e.g., *In the Matter of Trans Video Communications, Inc.*, 18 FCC Rcd 18211 (2003). Although the Division initially held that TVC had a PSA, making its application moot, the Division subsequently clarified that its order did not purport to establish a PSA for any of TVC's facilities. See *In the Matter of Trans Video Communications, Inc.*, DA 04-3028, at ¶ 7 (September 21, 2004).

²⁶ See Grand Alliance, Informal Comments, File No. BMLIF-870429DF, at 5 (March 14, 1996).

²⁷ See Letter to Bruce D. Jacobs from D'wana R. Terry, 18 FCC Rcd 12314 (2003). The Relocation Application was subsequently granted in a public notice. See Public Notice, Report Number 1627, at p. 26 (October 8, 2003).

of innovative and efficient communications technologies and services.”²⁸ As the Commission noted, “[t]he new band plan . . . provides new incentives for the development of low-power cellularized broadband uses of the [MMDS/ITFS] band, which have been thwarted by the legacy band structure.”²⁹ The Commission did not resolve how co-channel MMDS and ITFS licensees were to operate under the new regime but invited general comments on that subject. As one possible solution, the Commission suggested continued reliance on voluntary good faith negotiations to resolve mutual exclusivity between co-channel licensees.³⁰

Current Negotiations. At the urging of Commission staff and because of the language in the *FNPRM*, NY3G has met in the past several months with TVC on three separate occasions to discuss the possible sharing of the F group channels. In two meetings, TVC threatened to walk out when NY3G mentioned TVC’s prior commitment to vacate the F group channels and its ability to use the B group channels. On one occasion, TVC irrationally and arbitrarily refused to meet until NY3G agreed not to include its Chief Operating Officer in the discussion.³¹ In the meetings, NY3G offered to keep TVC whole by allowing it to use the high-power F group channel under the Commission’s new service rules and by upgrading TVC’s analog facilities to

²⁸ See *In the Matter of Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands*, FCC 04-135, at ¶ 1 (July 29, 2004) (“*FNPRM*”).

²⁹ *Id.* at ¶ 6.

³⁰ See *id.* at ¶ 340.

³¹ NY3G’s Chief Operating Officer has never previously had any dealings with TVC.

digital facilities.³² Initially, TVC responded favorably to the proposal, but then abruptly changed its mind and stated that it would not consider any proposal requiring it to relinquish any of its licensed spectrum. TVC offered no firm counterproposal.

NY3G's Current Operations. At present, NY3G operates an MMDS station, which is authorized to provide only west-facing service from the ESB.³³ NY3G's operations are constrained by TVC's F group facilities. With the legal ability to provide service within its full service area, NY3G expects to use its F group channels to deploy low-power facilities capable of providing two-way, high-speed broadband services to a variety of mobile terminals, including PDAs, laptops and mobile videophones. NY3G intends to focus on the provision of affordable service to consumers that have historically been underserved by legacy communications providers. If the FCC grants the Petition, NY3G anticipates deploying its system expeditiously. In fact, NY3G has actively pursued discussions with and issued a Request for Information ("RFI") from several vendors, including Alvarion, Inc.; Axcera; ArrayComm, Inc.; Motorola, Inc.; Navini Networks, Inc.; NextNet Wireless, Inc.; and Vcom, Inc.

³² Under digital operations, a licensee would be able to transmit on one digitized channel all the instructional programming that it currently provides on four analog channels. *See FNPRM*, at ¶ 314; *see also* Grand Alliance, WT Docket No. 03-66, Reply Comments, at 6-7 (October 23, 2003).

³³ *See* Letter to Grand MMDS Alliance New York F/P Partnership from Charles E. Dziedzic, Assistant Chief, Video Services Division, Reference No. 1800E6, File No. 5455-CM-P-83, at 4 (May 6, 1997).

Discussion

I. TVC'S USE OF THE F GROUP CHANNELS VIOLATES THE COMMISSION'S RULE LIMITING ITFS LICENSEES TO FOUR CHANNELS

TVC's use of the F group channels as relays to retransmit programming from its B group facility violates the Commission's rule, 47 C.F.R. § 74.902(d)(1), limiting ITFS licensees to four channels (one channel group) in any one area of operation.³⁴ The available evidence indicates that TVC did not request and that the Commission did not grant a waiver of the restriction.³⁵ The Commission has authority to modify a license in the public interest and "to revoke a station license, when conditions come to its attention that would have warranted an original refusal of the application."³⁶

³⁴ The Commission originally defined an area of operation as "the area in which the use of channels by one licensee precludes their use by other licensees." See *Hispanic Information & Telecommunications Network, Inc. v FCC*, 865 F.2d 1289, 1296 (D.C. Cir. 1989). The Commission has since revised its definition. See, e.g., *Amendment of Part 74 of the Commission's Rules with Regard to the Instructional Television Fixed Service*, 10 FCC Rcd 2907, at ¶ 44 (1995) (defining area of operation to be 20 miles from the transmitter site); 47 C.F.R. § 74.902(d)(1) (defining area of operation to be 35 miles or less from the transmitter site).

³⁵ While the rules at that time permitted applicants to propose relay facilities, those facilities must nonetheless comply with the Commission's four-channel restriction. See *Hispanic Information & Telecommunications Network, Inc. v FCC*, 865 F.2d at 1296-97 (expressly rejecting Commission argument that the four-channel rule is not implicated where applicant requests additional stations to be used as relays).

³⁶ *In the Matter of Southern Union Gas Company*, 15 FCC Rcd 10995, at ¶ 3 (2000) (citing 47 U.S.C. § 312(a)(2)); see also 47 U.S.C. § 316; *California Metro Mobile Communications, Inc. v. F.C.C.*, 365 F.3d 38, 44 (D.C. Cir. 2004) (affirming Commission decision to delete frequencies from licensee's authorization over a year after grant, in order to cure ongoing violation); *In the Matter of Browning Ferris Industries of Illinois*, 18 FCC Rcd 12649 (2003) (Commission has authority to revoke erroneously granted license and also to modify such license); *In the Matter of Davis Electronics, Inc.*, 17 FCC Rcd 10400 (2002) (denying retroactive waiver request of licensee subsequently found ineligible to hold license, but holding that revocation was unnecessary because license could be modified).

II. TVC'S USE OF THE F GROUP CHANNELS IS INEFFICIENT AND WOULD NOT WARRANT A WAIVER OF THE FOUR-CHANNEL RESTRICTION

The Commission has repeatedly affirmed the four-channel restriction over the years, stating that the rule promotes diversity of programming and ownership.³⁷ This case is no exception. TVC already operates on the B group channels in the New York City area, and its use of the F group channels is unnecessary. TVC applied for and received an authorization to operate its main ITFS facility from the ESB, and as TVC argued in that proceeding, grant of that application would allow it to provide service on the B group channels to all of the registered receive sites of its F group facilities.³⁸

NY3G is prepared to bear the reasonable costs of facilitating that move. NY3G estimates that such costs would include leasing the necessary space on the Empire State Building, physically relocating TVC's B group transmitter to that location, and reorienting TVC's F group receive antennas. Consistent with Commission precedent, NY3G would assume any increased operational or maintenance costs associated with the use of the replacement facilities for five

³⁷ See, e.g., *Amendment of Part 74 of the Commission's Rules and Regulations with Regard to the Instructional Television Fixed Service*, 57 RR 2d 1166, ¶ 10 (1985) ("absent such a limitation, an ITFS licensee or applicant could secure all available ITFS channels within a given area, thereby precluding others from providing . . . services."); *Amendment of Part 74 of the Commission's Rules and Regulations with Regard to the Instructional Television Fixed Service*, 101 FCC 2d 50, ¶ 51 (1985) (four-channel restriction promotes ownership diversity); *Amendment of Part 74 of the Commission's Rules with Regard to the Instructional Television Fixed Service*, 10 FCC Rcd 2907, at ¶ 39 (1995).

³⁸ The Commission has authority to hold TVC to its statements inducing grant of that application. See, e.g., *In the Matter of The Trustees of Indiana University*, 8 FCC Rcd 5555, at ¶¶ 3, 23 (1993) (relying on licensee's commitment, as justification for grant of an application, that it would surrender its two E group channels if Commission granted modification application regarding licensee's B group channels).

years after relocation.³⁹ To the extent that additional efforts are necessary to preserve fully TVC's ability to serve all of its registered F group receive sites, NY3G will implement the least-cost solutions.

TVC's use of eight channels on two channel groups in the same market impairs NY3G's competitive entry in the nation's largest market. At a time when consolidation among major wireless carriers, including Nextel which holds the long-term lease agreement for TVC's spectrum, is accelerating, the Commission should take action that facilitates, rather than frustrates, competition.⁴⁰

For similar reasons, a waiver of the four-channel restriction would not be warranted. As the Commission has stated, "[t]he waiver burden will be exceedingly high particularly in areas where a large demand for channels exists."⁴¹ A party seeking a waiver must provide a "complete description of how the additional channels will be used for traditional ITFS purposes and why present channel capacity is insufficient to accommodate the additional needs."⁴² Here, the programming TVC provides is admittedly just retransmissions of broadcasts from its main ITFS facility. Thus, TVC's situation is unlike those cases in which the Commission has granted

³⁹ See, e.g., 47 C.F.R. § 101.91(b)(3).

⁴⁰ See, e.g., *Nextel-Sprint Merger Raises Regulatory Issues*, Communications Daily, December 15, 2004, at 3 (noting that Sprint and Nextel have "dominant" interests in MMDS spectrum).

⁴¹ *Amendment of Part 74 of the Commission's Rules and Regulations in Regard to the Instructional Television Fixed Service*, 98 FCC 2d 925, at ¶ 19 (1984).

⁴² *Id.*; see also *In the Matter of Board of Regents, Eastern New Mexico University*, 10 FCC Rcd 3162, at ¶ 4 (1995).

waivers of the four-channel restriction.⁴³ In any case, such service can be provided more efficiently using a variety of alternative technologies or media, such as online video streaming or PEG access channels.⁴⁴

Moreover, grant of this Petition would promote the public interest. As demonstrated in the economic study attached to NY3G's Comments to the Commission's *FNPRM*, the provision of two-way, mobile broadband services is the most productive and valued use of the spectrum.⁴⁵ The provision of such service to the more than fifteen million people in New York City would generate an estimated consumer savings in the hundreds of millions of dollars⁴⁶ and would promote broadband availability, a key priority of the Commission and the Administration.⁴⁷ In contrast, TVC uses the F group channels simply to provide one-way video service to a few, fixed

⁴³ See, e.g., *In the Matter of Board of Regents, Eastern New Mexico University*, 10 FCC Rcd 3162, at ¶ 4 (1995) (granting waiver where ITFS licensee demonstrated that "there is no repetition among the programs and the programming on all eight channels will be presented simultaneously between 8:00 a.m. and 4:30 p.m., Monday through Sunday"); *In the Matter of Northern Arizona University Foundation*, 7 FCC Rcd 5943, at ¶ 8 (1992) (granting waiver where licensee "indicated that at least five of the six channels will be used for substantial portions of the school day and all will be used simultaneously for substantial portions of the day."); *In the Matter of Applications of Pojoaque High School*, 18 FCC Rcd 19304, at ¶ 3 (2003) (granting waiver where there is "no repetition among the programs and . . . the programming on all eight channels will be presented simultaneously throughout most of the school day.").

⁴⁴ TVC or its affiliate already has capacity on two cable systems in the New York City area. See <http://www.pastcomm.org/prayerchannel/index.html> (last visited January 7, 2005).

⁴⁵ See generally, NY3G Partnership, Comments, WT 03-66, at Exhibit B (January 10, 2005) ("Hazlett Study").

⁴⁶ See *id.*

⁴⁷ See *FNPRM*, at ¶ 5; President George W. Bush, "A New Generation of American Innovation," at pp. 11-12 (April 2004), available at http://www.whitehouse.gov/infocus/technology/economic_policy200404/innovation.pdf (last visited January 10, 2005).

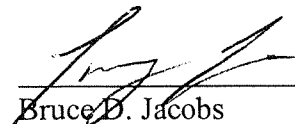
number of registered receive sites – a service that can be provided “by a host of alternatives at a tiny fraction of the opportunity cost of the radio spectrum.”⁴⁸

⁴⁸ Hazlett Study, at 6.

Conclusion

For the reasons stated above, the Commission should modify TVC's interrelated ITFS authorizations and restrict its operations to the B group channels.

Respectfully submitted,

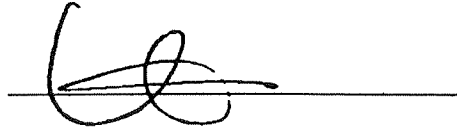
By: 
Bruce D. Jacobs
Tony Lin
Shaw Pittman LLP
2300 N St. NW
Washington, DC 20037-1128
Counsel for NY3G Partnership

Dated: January 10, 2005

CERTIFICATION

On behalf of NY3G Partnership, I hereby certify, under penalty of perjury, I have reviewed the foregoing pleading and it is complete and accurate to the best of my knowledge.

By: _____

A handwritten signature in black ink, consisting of a large, stylized 'H' followed by a cursive 'M' and 'Z', written over a horizontal line.

Henry M. Zachs President Zipwave I Inc.
Partner, NY3G Partnership

January 10, 2005

Certificate of Service

I hereby certify that, on this 10th day of January 2005, a true and correct copy of the foregoing Petition was sent via first-class U.S. mail to the following:

William D. Wallace
Crowell & Moring, LLP
1001 Pennsylvania Avenue, NW
Washington, DC 20004-2595



Renee Williams

ATTACHMENT A

FCC Form 330P
September 1963

Form Approved
Budget Bureau No. 52-R186

Section 1

UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES IN AN
INSTRUCTIONAL TELEVISION FIXED
STATION

INSTRUCTIONS

A. This form is to be used only in applying for authority to construct a new Instructional Television Fixed station or to make changes in an existing station. This form consists of this part, Section I, and the following sections:

Section II, Legal Qualifications of Applicant
Section III, Financial Qualifications of Applicant
Section IV, Statement of Program Service of Applicant
Section V, Engineering Data

B. PREPARE THREE COPIES of this form and all exhibits. Sign one copy of Section I. File all the above with the Federal Communications Commission, Washington, D. C. 20554

C. Number exhibits serially in the space provided in the body of the form and list each exhibit in the space provided on page 2 of this Section. Show date of preparation of each exhibit, antenna pattern, and map.

D. The name of the applicant stated herein shall be the exact corporate name, if a corporation; if an unincorporated association, the exact name of the association; if a governmental or public educational agency, the exact name of such agency. The applicant must notify the Commission of any change of address.

E. A single application should be used for more than one channel if the associated transmitters are to be located at a common antenna site. Transmitters having different transmitting antenna locations must be filed on SEPARATE applications.

F. Information called for by this application which is already on file with the Commission need not be refiled in this application provided (1) the information is now on file in another application or FCC form filed by or on behalf of this applicant; (2) the information is identified fully by reference to the file number (if any), the FCC form number and the filing date of the application or other form containing the information and the page or paragraph referred to, and (3) after making the reference, the applicant states: "No change since date of filing." Any such reference will be considered to incorporate into this application the application or other form referred to in its entirety. Do not incorporate by reference any material which is not to be open to the public.

G. This application shall be personally signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer, if the applicant is a corporation; by a member who is an officer, if the applicant is an unincorporated association; by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction, if the applicant is an eligible government entity; or by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. The attorney shall, in the event he signs for the applicant, separately set forth the reason why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.

H. Before filing out this application, the applicant should familiarize himself with the Communications Act of 1934, as amended, Parts 1, 2, 17 and 74 of the Commission's Rules and Regulations.

I. BE SURE ALL NECESSARY INFORMATION IS FURNISHED AND ALL PARAGRAPHS ARE FULLY ANSWERED. IF ANY PORTIONS OF THE APPLICATION ARE NOT APPLICABLE, SPECIFICALLY SO STATE. DEFECTIVE OR INCOMPLETE APPLICATIONS MAY BE RETURNED WITHOUT CONSIDERATION.

*cc: James E. Greeley, Esq., 1343

FOR COMMISSION USE ONLY

File No.

Name and address of applicant (See Instruction D)

THE ROMAN CATHOLIC DIOCESE
OF BROOKLYN, NEW YORK

Name

Address 75 Greene Avenue

Zip Code

City Brooklyn State New York

11238

Send notices and communications to the following-named person at the post office address indicated:

Name Rev. Michael J. Dempsey *

Address 75 Greene Avenue

Zip Code

City Brooklyn State New York

11238

1. Requested facilities for Instructional Television Fixed Station (See Instruction E)

a. Channel No. (s):

F-1, F-2, F-3 and F-4

b. Principal area to be served:

(School District or other descriptive location.)

Portion of Brooklyn, New York

2. If authority to make changes in an existing station or authorization is requested:

a. No. file and call of authorization:

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b. Present facilities:

Channel No. (s)

F. C. C.

c. Principal area served:

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d. If this application is for changes in an existing authorization, complete Section I and any other sections necessary to show all substantial changes in information filed with the Commission in prior applications or reports. In the space below check Sections submitted herewith, and as to Sections not submitted herewith refer to the prior application or report containing the requested information in accordance with Instruction F.

Section No. Para. No. Reference (file or Form No. and date)

- ☒ Section II
☒ Section III
☒ Section I V
☐ Section V

File No. BPIF-9,

June 5, 1964

Have there been any substantial changes in the information incorporated in this application by reference in this paragraph?

Yes ☐ No ☒

If "Yes," submit as Exhibit No.

full particulars.

Is this application filed for the purpose of impeding, obstructing or delaying determination on any other application with which it may be in conflict?

Yes ☐ No ☒

If "Yes," detail full particulars:

H St., N.W., Washington, D.C. 20005

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FCC Form 330P

FEDERAL COMMUNICATIONS COMMISSION

Section V - Page 1

ENGINEERING DATA

NAME OF APPLICANT

FOR COMMISSION USE ONLY

The Roman Catholic Diocese of Brooklyn, New York

File No.

1. Purpose of authorization applied for: (Indicate by check mark.)

- ☒ (a) Construct a new station
- ☐ (b) Modify an existing authorization to change:
- ☐ 1. Transmitter type or modification
- ☐ 2. Transmitting Antenna type, gain or directivity
- ☐ 3. Transmitting Antenna height or location
- ☐ 4. Transmitter control method

- ☐ 5. Transmitter location
- ☐ 6. Frequency assignment
- ☐ 7. Operating power
- ☐ 8. Other (describe below)

File number and call of authorization to be modified:

Note: In applications for changes in existing authorizations, only the following items pertinent to the proposed changes need to be completed.

2. Facilities requested:

Note: Use a separate column for each transmitter located at the site specified in Item 3 below. Include only transmitters having a common antenna site in this application. A separate application is required for each different transmitter location.

(a) Transmitter Identification No.	T1	T2	T3	T4	T5
(b) Channel No. <u>1/</u>	F-1	F-2	F-3	F-4	
(c) Station Purpose <u>2/</u>	Relay	Relay	Relay	Relay	
(d) Signal Source (For relay station only) <u>3/</u>	To repeat programs of KNZ-69, at Bishop Ford High School, Brooklyn, for reception in schools presently unable to receive service from KNZ-69 or from relay KNZ-70 in Queens.				
(e) Transmitter Make and Model No. <u>4/</u>	Micro-Link RE-1A	Micro-Link RE-1A	Micro-Link RE-1A	Micro-Link RE-1A	
(f) Transmitter Rated Output Power <u>5/</u>	10 watts	10 watts	10 watts	10 watts	
(g) Proposed Transmitter Operating Output Power <u>6/</u>	5 watts	5 watts	5 watts	5 watts	
(h) Transmitting Antenna Make and Model No. <u>7/</u>	-----Micro-Link Model AT-4V-----				
(i) Transmitting Antenna Type <u>8/</u>	-----Colinear dipole array-----				
(j) Transmitting Antenna Maximum Lobe Gain (DB) <u>9/</u>	-----10 db-----				
(k) Transmitting Antenna Overall height above ground (FT) <u>10/</u>	-----115-----				
(l) Polarization of Radiated Signal <u>11/</u>	-----Vertical-----				

- 1/ Use channel designators shown in Rules for particular frequency band limit proposed, such as A-1, A-2, A-3, etc. (See Rule 74.902)
- 2/ Specify either "Originating" or "Relay."
- 3/ When station is to be used as a "Relay" station, indicate source of signal, i.e., other instructional TV fixed station, educational or commercial TV station, or other class of station, by entering call or file number and location of station to be relayed.
- 4/ Use abbreviation of manufacturer's name with model designation.
- 5/ Specify output power (peak visual) in watts as rated by manufacturer.
- 6/ Specify proposed operating output power (peak visual). Application proposing operating output power greater than 10 watts (peak visual) must be accompanied by special showing required by Section 74.935(b) of the Rules.
- 7/ Use abbreviation of manufacturer's name with model designation.
- 8/ State basic type using general descriptive terms, such as 6-ft. parabola, corner reflector, helix, etc.
- 9/ State maximum power gain (DB) in horizontal plane with respect to isotropic radiator.
- 10/ Specify proposed overall height of antenna above ground level in feet.
- 11/ Specify polarization of radiated signal, such as horizontal, vertical, left or right-hand circular, etc.

(m) Has each one of the above-listed transmitters been type accepted by the FCC for this service? ☐ Yes ☒ No

If answer is "No," attach, as Exhibit No. _____, a complete showing of transmitter details, including technical specifications and schematic diagram. If this information is presently on file with the FCC by the manufacturer, omit such information from application and check here ☒.

3. Proposed transmitter location: St. Cecilia School

(a) State New York

County Kings

City New York
(Brooklyn)

Address or other description of location

1-15 Monitor Street

Geographical coordinates of transmitting antenna(s) to the nearest second:

North Latitude

West Longitude

40° 43' 09" 73° 56' 32"

(b) Will the proposed transmitting antenna supporting structure be shared with another instructional television fixed station or station of any other classification? ☐ Yes ☒ No

If answer is "Yes," list the call sign and classification of each such station.

(c) Attach, as Exhibit No. Eng -, a map or maps of appropriate scale and detail (preferably U. S. Geological Survey Topographic Quadrangles) for the proposed area to be served by the transmitter(s) and show drawn thereon the following:

- (1) Scale of miles.
- (2) Direction of true north.
- (3) Outline of principal school district or other area intended to be served by proposed system.
- (4) Location of proposed transmitting site, accurately plotted.
- (5) Location of all known radio stations (except amateur), such as AM, FM, TV, instructional TV fixed, operational fixed, police, fire, aeronautical, etc., and known commercial or government receiving sites, located within 1000 feet of the proposed site.
- (6) Location of each receiving location intended to be served by each transmitter listed in Item 2 above. Each receiving location intended to be served should be identified by an individual symbol, such as R1, R2, etc. By means of a separate sheet, further identify the designated receiving sites by name of school or building, address, and azimuth and air line distance from the transmitter location.

Note: Where the receiving sites for the proposed system are so widely separated geographically that to show them on the same or several maps would result in an unwieldy and voluminous exhibit, it will be acceptable in lieu thereof to furnish a reduced composite exhibit consisting of a sketch drawn approximately to scale showing the azimuthal and distance relationships between the transmitting and receiving sites. In any event, the transmitter site shall be shown plotted on a map as described in Item 3(c) above.

(d) Attach, as Exhibit No. Eng - to Eng -, map or maps of the boundaries of the school districts to be served and of the contiguous school districts.

(e) (1) Attach, as Exhibits No. Eng - to Eng -, separate vertical plan views of the antenna installation of the transmitting and each receiving location proposed, showing the ground elevation of the site above mean sea level, the height above ground of any building or other man-made structure on which the antenna(s) will be mounted, giving separate vertical dimensions for the building or other existing structure which may be used, and the entire height above ground of the tower or mast proposed to be erected to support the antenna(s). Indicate thereon the overall height above ground for each antenna. Each sketch shall be prepared on an 8 x 10½ inch sheet. The reference numbers used above, such as T1, T2, R1, R2, etc., should be used to identify the various transmitting and receiving locations.

(2) With each vertical plan view for the transmitting antenna(s), associate a separate 8 x 10½ inch sheet containing a polar diagram of the horizontal relative FIELD pattern and indicate thereon the direction of true north with respect to the proposed antenna orientation. Also label the polar diagram at the appropriate point with the maximum horizontal radiation lobe power gain expressed in db with respect to an isotropic radiator.

NOTE: In the event it is proposed to intentionally radiate power in directions other than toward the above-described receiving locations, a complete statement shall be furnished as to the purpose of such additional radiation.

4. Remote Control operation:

Will any transmitter listed above be operated by remote control? ☐ Yes ☒ No

If the answer is "Yes," and this application is for authority to construct a new station, or to employ remote control for the first time for an authorized station, attach an Exhibit, No. _____, identifying applicable transmitters and furnish a full description as to the manner of compliance with Section 74.933 of the Rules.

5. Unattended operation:

Will any transmitter listed above be operated as an unattended automatic relay? ☒ Yes ☐ No.

If the answer is "Yes," and this application is for authority to construct a new automatic relay station, or to make changes in an authorized automatic relay station which will for the first time be operated unattended, attach an Exhibit, No. _____, identifying applicable transmitters and furnish a full description as to the manner of compliance with Section 74.934 of the Rules. On file by manufacturer

6. The Federal Aviation Agency (FAA), pursuant to Part 77 of the Federal Aviation Regulations, requires notification of certain construction or alteration of antenna structures. Antenna structures which do not exceed an overall height of 20 feet above ground, and antenna structures increasing by 20 feet or less the height of existing man-made structures, other than existing antenna structures, do not require notification. Accordingly, applicant's determination as to whether filing of Form FAA-117 with the FAA is necessary for the proposed construction of either transmitting or receiving antenna structures shall be noted by checking the appropriate statement below:

☒ Notification to the FAA is not required for the construction proposed herein.☐ Notification to the FAA for the construction proposed herein was made on Form FAA-117 on _____.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Date October 6, 1966Signature William C. King, Jr.
(check appropriate box below)

*See Engineering Exhibit

☐ Technical Director ☐ Chief Operator
☒ Registered Professional Engineer
☒ Consulting Engineer

THE APPLICANT hereby waives any claim to the use of any particular frequency or of the ether as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934).

THE APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

THE APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all the exhibits are a material part hereof and are incorporated herein as if set out in full in the application.

C E R T I F I C A T I O N

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this 19 day of October, 19 66.

**THE ROMAN CATHOLIC DIOCESE
OF BROOKLYN, NEW YORK**

(NAME OF APPLICANT)

By  (SIGNATURE)
Franklin E. Fitzpatrick

WILLFUL FALSE STATEMENTS MADE ON THIS FORM
ARE PUNISHABLE BY FINE AND IMPRISONMENT.

U.S. CODE, TITLE 18, SECTION 1001.

Title Superintendent of Schools

If applicant is represented by legal or engineering counsel, state name and post office address: **James E. Greeley, Esq., 1343 H St., N.W., Washington, D.C. 20005; Jules Cohen & Associates, 729 - 15th St., NW Washington, D. C. 20005**

EXHIBITS furnished as required by this form:

Exhibit No.	Section and Para. No. of Form	Name of officer or employee (1) by whom or (2) under whose direction exhibit was prepared (show which)	Official title
Eng'r'g Report	Sec. V	Jules Cohen (2)	Consulting Engineer

JULES COHEN & ASSOCIATES
CONSULTING ELECTRONICS ENGINEERS
WASHINGTON, D. C.

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ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
INSTRUCTIONAL TELEVISION FIXED STATION
ROMAN CATHOLIC DIOCESE OF BROOKLYN,
NEW YORK
ST. CECILIA SCHOOL

CHANNELS F-1, F-2, F-3, F-4

October 6, 1966

JULES COHEN & ASSOCIATES

CONSULTING ELECTRONICS ENGINEERS

WASHINGTON, D. C.

ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
INSTRUCTIONAL TELEVISION FIXED STATION
ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK
ST. CECILIA SCHOOL
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Table of Contents

Engineering Statement

Figure 1	Proposed Antenna and Supporting Structure
Figure 2	Proposed Transmitter Location and Schools To Be Served
Figure 3	Tabulation of Receiving Locations
Figure 4	Sketch of Typical Receiving Antenna Installation

Affidavit of William C. King, Jr.

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ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK
ST. CECILIA SCHOOL
CHANNELS F-1, F-2, F-3, F-4

Engineering Statement

The engineering exhibit incorporating this statement was prepared pursuant to the provisions of Section V of FCC Form 330P, in support of an application for construction permit for instructional television fixed station by the Roman Catholic Diocese of Brooklyn, New York. The applicant is permittee of two presently operating instructional television fixed stations: KNZ-69, located at Bishop Ford High School in Brooklyn, and KNZ-70, an unattended relay at Mary Louis Academy in Queens. The instant application seeks authority to construct a second unattended relay station which would employ four transmitters, each of which would operate on one of the four channels listed in Frequency Group F of Section 74.902(a) of the Rules. The proposed transmitters would be expected to provide service to seventeen schools of the Diocese of Brooklyn which presently are unable to receive signals from either of the two operating stations.

Transmitting and Receiving Locations

The proposed transmitting antenna would be installed on the roof of St. Cecilia School, 1-15 Monitor Street,

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Engineering Statement
Brooklyn, New York

page 2

Brooklyn, New York. A sketch showing the antenna and supporting structure is included herein as Figure 1. Geographic coordinates of the transmitting site are:

40° 43' 09" North Latitude
73° 56' 32" West Longitude.

A parabolic receiving antenna, not shown in Figure 1, also would be erected on the roof of the eight-story St. Cecilia School building. This antenna would be used to receive Group B transmissions from station KNZ-69 at Bishop Ford High School. The Group B transmissions would be frequency translated and retransmitted as Group F channels by means of the equipment proposed herein.

Figure 2 is a topographic map showing the location of the proposed St. Cecilia transmitter and the locations of schools expected to receive its transmissions. Most of the schools to be served are located in the Williamsburg-Greenpoint sections of Brooklyn. This area is shadowed with respect to the originating transmitter (at Bishop Ford High School) by tall buildings near the intersection of Flatbush Avenue and Eastern Parkway in Brooklyn. The same area is shadowed with respect to the relay transmitter in Queens, by intervening hills or man-made obstructions.

Names and addresses of the school locations designated in Figure 2 are tabulated in Figure 3, together with the azimuth angles and airline distances from the transmitting location to each receiving point.

Engineering Statement
Brooklyn, New York

page 3

Allocation Considerations

The geographic area served by the Diocese of Brooklyn includes the entire New York City boroughs of Brooklyn and Queens. The Diocese is contiguous with the Catholic Diocese of Rockville Centre on the east, and the Roman Catholic Archdiocese of New York on the west, both of which have construction permits for transmitters operating in the instructional fixed television service.

In an effort to conserve spectrum space, and to reduce allocation problems to the greatest extent practicable, it is proposed that the St. Cecilia relay operate on Channel Group F, the same channel group now employed by the Diocese of Brooklyn relay station (KNZ-70) in Queens. The St. Cecilia site is 8.2 miles west of KNZ-70, and 4.9 miles northeast of the Bishop Ford High School originating transmitter.

The proposed operation will have no impact upon existing instructional fixed television assignments on Long Island. Schools of the Archdiocese of New York in nearby Manhattan employ Channel Group A, and would be unaffected by the instant proposal.

Radiation from the proposed St. Cecilia relay transmitter will be cross polarized with respect to existing adjacent Channel Group E assignments to the Archdiocese of New York for transmitters on Staten Island and in Yonkers. Because the area intended to be served by the St. Cecilia repeater is relatively small, visual transmitter output power will be limited to five watts (one-half the rated output of the transmitter). No adjacent channel interference to schools of the Archdiocese of New York is anticipated, partly due to the

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Engineering Statement
Brooklyn, New York

page 4

limited power, cross polarization, and relatively short antenna height to be employed by the St. Cecilia repeater; and partially due to the physical separation of the respective service areas and to receiving antenna geometry.

The proposed St. Cecilia transmissions will be cross polarized also with respect to the horizontally polarized signals transmitted by the cochannel Queens relay station (KNZ-70). Cross polarization of transmitting antennas is expected to result in a discrimination of approximately 20 db against the undesired cochannel signal at most receiving locations.. Receiving antenna directivity and geometry, can be expected to provide another 20 to 30 db discrimination at the schools presently receiving satisfactory signals from the Queens transmitter. At the school locations tabulated in Figure 3, reception of the Queens relay is known to be either unsatisfactory or nonexistent. Cochannel interference within the Diocese of Brooklyn is not expected to create any serious reception problems.

Interference to other radio services is not anticipated, and there are no known transmitting stations within 1,000 feet of the proposed St. Cecilia site.

Proposed Equipment

The applicant proposes to employ four Micro-Link model RE-1A instructional television transmitters to be operated as unattended automatic relays. Each transmitter will be operated at a peak visual power output of 5 watts and an aural power output of 0.5 watt.. The radio frequency output to the four transmitters will be combined in a custom-built multiplexer

Engineering Statement
Brooklyn, New York

page 5

and fed to a Micro-Link model AT-4V transmitting antenna.

The model AT-4V antenna is a vertically polarized, stacked, colinear, dipole array having a horizontal power gain of 10 db with respect to an isotropic radiator. The antenna has a vertical plane beam width of 5 degrees and a radiation pattern in the horizontal plane which is omnidirectional to within ± 1 db. Because of the horizontal pattern circularity, a horizontal plane radiation pattern is not included with this exhibit.

Operation of the unattended relay transmitter will be conducted in accordance with the provisions of Section 74.934 of the Rules, and in a manner consistent with the type acceptance disclosure made by the transmitter manufacturer to the Commission. Adequate safeguards will be provided at the site to prevent unauthorized operation of the transmitting equipment, and one or more responsible individuals will be available at St. Cecilia School during normal operating hours to provide access to the equipment, should such access be required.

Receiving Equipment

The receiving equipment proposed to be installed at each of the designated reception sites will include a parabolic receiving antenna of sufficient gain to permit a satisfactory carrier-to-noise ratio at the input to a Micro-Link model CE-5, 2500 mc/s down converter to be located adjacent to the antenna. A sketch representing a typical receiving installation is shown in Figure 4. It is anticipated that receiving antennas at most locations would be mounted on short, self-supporting or guyed tower sections, on or adjacent to the school building to be served. In general, the over-all height of the

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Engineering Statement
Brooklyn, New York

page 6

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receiving antenna would not be expected to exceed the height of the existing building by more than 20 feet.

Path obstructions at a relatively small number of receiving locations may require somewhat greater antenna heights. In most instances, however, the heights employed would not be expected to exceed the heights of nearby flagpoles or church spires. In any event, each such installation will be considered with regard to the applicability of Part 77 of the Federal Aviation Regulations; and where appropriate, a Notice of Proposed Construction or Alteration will be submitted to the Federal Aviation Agency on FAA Form 117.

Aeronautical Considerations

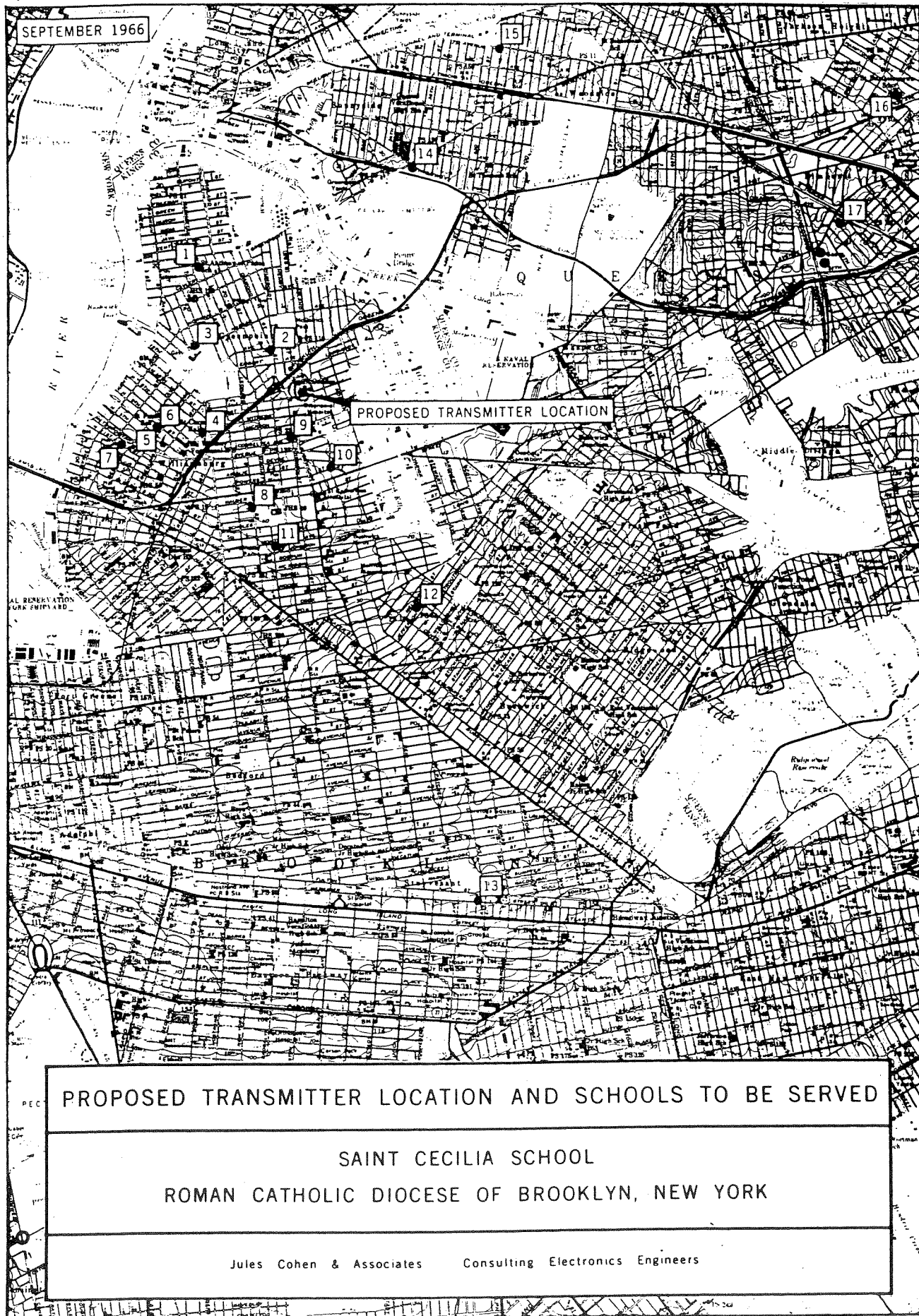
The height of the proposed St. Cecilia transmitting antenna will not exceed the height of the existing school building by more than 20 feet, and notification of proposed construction is not required by Part 77 of the Federal Aviation Regulations.

William C. King, Jr.

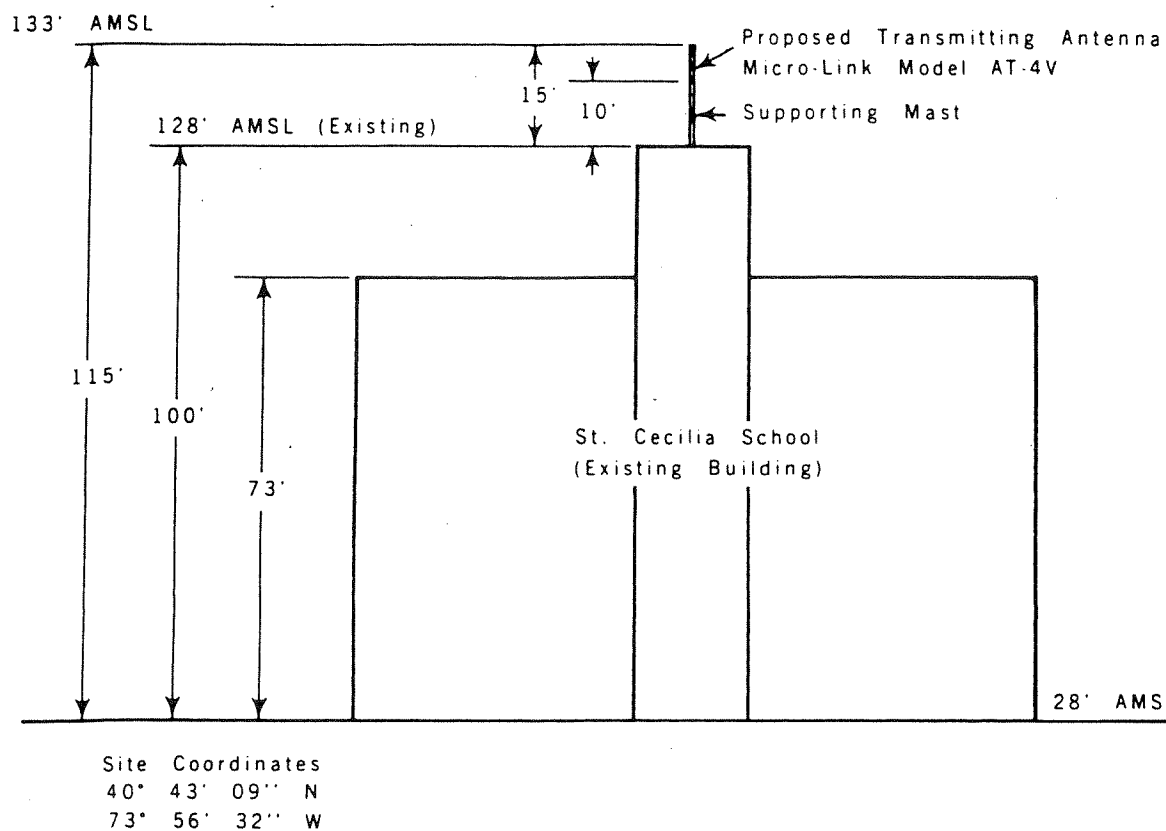
William C. King, Jr.

October 6, 1966

Figure 2



SEPTEMBER 1966



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

SAINT CECILIA SCHOOL
ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK

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ENGINEERING EXHIBIT
APPLICATION FOR CONSTRUCTION PERMIT
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ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK
ST. CECILIA SCHOOL
CHANNELS F-1, F-2, F-3, F-4

Tabulation of Receiving Locations

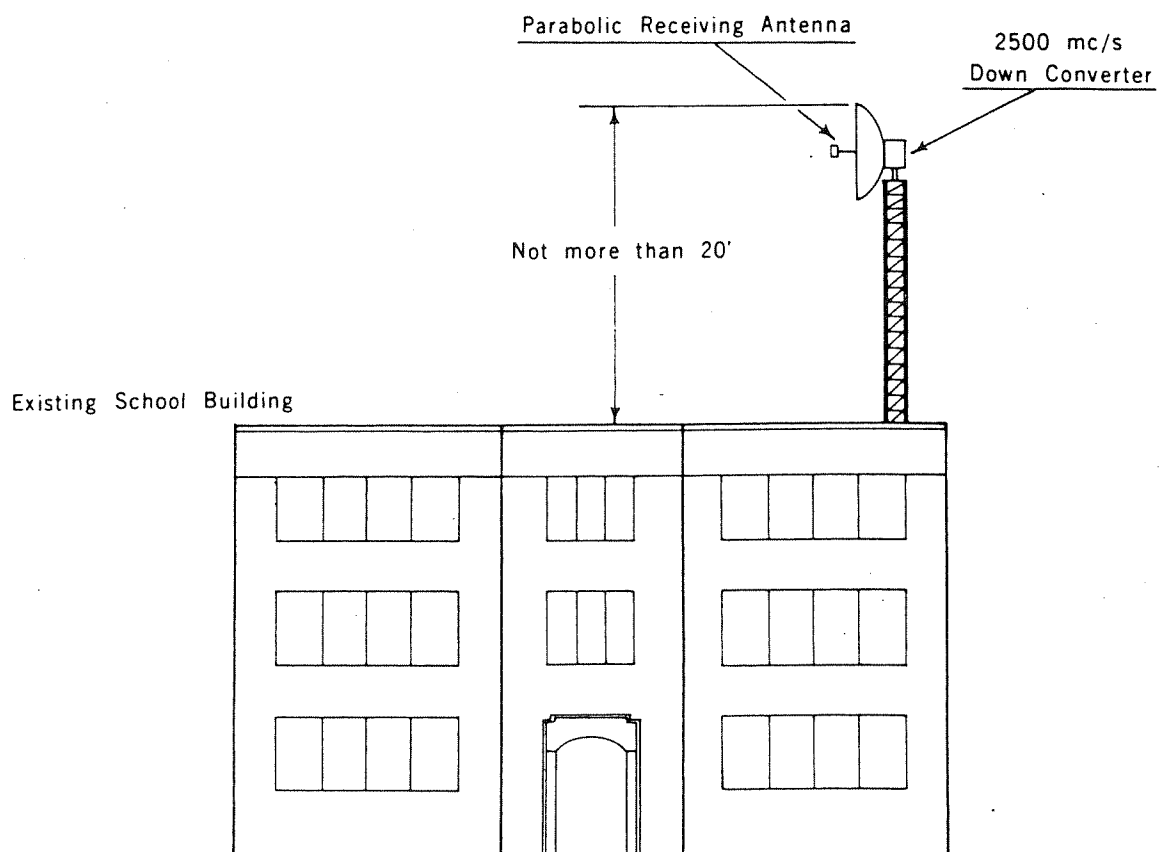
<u>Designation</u>	<u>Name</u>	<u>Azimuth</u> (degrees true)	<u>Distance</u> (miles)
1	✓ St. Anthony of Padua School 725 Leonard Street Brooklyn 22	319.3	0.92
2	✓ St. Stanislaus Kostka School 10 Newell Street Brooklyn 22	322.5	0.3
3	✓ Holy Family School 29 Dobbin Street Brooklyn 22	292.3	0.67
4	✓ Our Lady of Mount Carmel School 10 Withers Street Brooklyn 11	249	0.62
5	✓ St. Vincent De Paul School 584 Driggs Avenue Brooklyn 11	247	0.86
6	St. Francis Preparatory School 186 North 6 Street Brooklyn 11	257	0.86
7	✓ Our Lady of Consolation School 139 North First Street Brooklyn 11	255	1.07
8	✓ Immaculate Conception School 187 Leonard Street Brooklyn 6	245	0.7

Tabulation of Receiving Locations
Brooklyn, New York

Figure 3
Sheet 2 of 2

<u>Designation</u>	<u>Name</u>	<u>Azimuth</u> (degrees true)	<u>Distance</u> (miles)
9	St. Francis of Paola School 201 Conselyea Street Brooklyn 11	195	0.27
10	St. Nicholas School 287 Powers Street Brooklyn 11	157.5	0.45
11	Most Holy Trinity School 140 Montrose Avenue Brooklyn 6	190	0.87
12	St. Leonard School 271 Melrose Street Brooklyn 6	151	1.36
13	St. Benedict School 933 Herkimer Street Brooklyn 33	160.5	3.0
14	St. Raphael School 48-29 37 Street Long Island City 1	27	1.38
15	Queen of Angels School 41-12 44 Street Long Island City 4	31	2.2
16	St. Bartholomew School 44-15 Judge Street Elmhurst 73	64.5	3.77
17	Ascension School 86-37 53 Avenue Elmhurst 73	73	3.2

SEPTEMBER 1966



SKETCH OF TYPICAL RECEIVING ANTENNA INSTALLATION

SAINT CECILIA SCHOOL
ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK

Jules Cohen & Associates Consulting Electronics Engineers

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WASHINGTON, D. C.

ENGINEERING EXHIBIT
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INSTRUCTIONAL TELEVISION FIXED STATION
ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK
ST. CECILIA SCHOOL
CHANNELS F-1, F-2, F-3, F-4

Affidavit

WASHINGTON)
) ss:
DISTRICT OF COLUMBIA)

William C. King, Jr., being first duly sworn, says that he is a partner in the firm of Jules Cohen & Associates, consulting electronics engineers, with offices in Washington, D. C.; that he is a professional engineer registered in the District of Columbia; that his qualifications as an expert in radio engineering are a matter of record with the Federal Communications Commission; that the foregoing exhibit was prepared by him and under his direction; and that the statements contained therein are true of his own personal knowledge except those stated to be on information and belief, and as to those statements, he verily believes them to be true and correct.

William C. King, Jr.

William C. King, Jr.

Subscribed and sworn to before me this 6th day of
October, 1966.

Roberta Stewart

Roberta Stewart
Notary Public, D. C.

RADIO BROADCAST STATION LICENSE

INSTRUCTIONAL TV FIXED

(Class of station)

Subject to the provisions of the Communications Act of 1934, subsequent acts and treaties, and all regulations heretofore or hereafter made by this Commission, and further subject to the conditions and requirements set forth in this license, the LICENSEE,

THE ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK

is hereby authorized to use and operate the radio transmitting apparatus, hereinafter described, for radio broadcasting for the term beginning March 20, 1968, and ending March 20, 1973 only in accordance with the following terms:

(3 a. m. Eastern standard time)

1. Frequencies: Channels F-1 (2602-2608), F-2 (2614-2620), F-3 (2626-2632), F-4 (2638-2644)

2. Frequency tolerance: In accordance with Section 74.961 of the Rules

3. Types of emission: A5/F3

4. With an output power not in excess of 5 watts. (Peak visual)

5. Hours of operation - Unlimited

6. Transmitter location (if base station): State New York County Kings

City or Town Brooklyn

Street and number 1-15 Monitor Street

North Latitude: Degrees 40 Minutes 43 Seconds 09

West Longitude: Degrees 73 Minutes 56 Seconds 32

7. Broadcast station with which it is to be operated

Receiving sites as proposed in application

8. Description of transmitting apparatus: Four (4) Micro-Link, Type RE-1A, 9 watts
Antenna: Micro-Link, Type AT-4V, Colinear Dipole Array (Vertical Polarization)
Horizontal radiation: Omni-directional
Supporting structure: 100 foot building
Overall height above ground level: 115 feet
Overall height above mean sea level: 143 feet

Subject to the condition that prior authority shall be obtained for construction of any receiving antenna structure to be associated with this station which increases height of any man-made structure more than 20 feet.

The Commission reserves the right during said license period of terminating this license or making effective any changes or modification of this license which may be necessary to comply with any decision of the Commission rendered as a result of any hearing held under the rules of the Commission prior to the commencement of this license period or any decision rendered as a result of any such hearing which has been designated but not held, prior to the commencement of this license period.

This license is issued on the licensee's representation that the statements contained in licensee's application are true and that the undertakings therein contained, so far as they are consistent herewith, will be carried out in good faith. The licensee shall, during the term of this license, render such service as will serve public interest, convenience, or necessity to the full extent of the privileges herein conferred.

This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term hereof, nor in any other manner than authorized herein. Neither the license nor the rights here- in granted shall be transferred, assigned, or in any manner either voluntarily or involuntarily disposed of, or indirectly by transfer of control of the licensee, if a corporation, to any person without the written consent of the Commission. This license is subject to the right of use or control by the Government of the United States conferred by section 606 of the Communications Act of 1934.

DATED March 20, 1968

mlw



F.C.C. - WASHINGTON, D. C.

FEDERAL COMMUNICATIONS COMMISSION,

Ben F. Waple
Secretary

ATTACHMENT B

CHANNEL COORDINATION AND
CHANNEL LEASE AGREEMENT

BETWEEN

TRANS VIDEO COMMUNICATIONS, INC.

AND

ULTRAVISION, INC.

HURLEY, KEARNEY & LANE
Attorneys for Trans Video
Communications, Inc.
32 Court Street
Brooklyn, New York 11201

FISHER, WAYLAND, COOPER & LEADER
Attorneys for Ultravision, Inc.
1255 23rd Street, N.W.
Washington, D.C. 20037

TABLE OF CONTENTS

	<u>PAGE</u>
RECITALS	1
SECTION 1 - Transmission Facilities	3
SECTION 2 - Regulatory Cooperation	6
SECTION 3 - Operation of Facilities	8
SECTION 4 - Leased Channels	10
SECTION 5 - Payment	12
SECTION 6 - Programming	14
SECTION 7 - Program Review Procedures	15
SECTION 8 - Non-competition	16
SECTION 9 - Shared Income Channel	17
SECTION 10 - Combanding	18
SECTION 11 - Promotion	20
SECTION 12 - Names and Symbols	21
SECTION 13 - Term	21
SECTION 14 - First Renewal	21
SECTION 15 - First Right of Refusal	23
SECTION 16 - Conditions	23
SECTION 17 - Termination	24

TABLE OF CONTENTS

	<u>PAGE</u>
SECTION 18 - Severability	25
SECTION 19 - Indemnification	25
SECTION 20 - Insurance	25
SECTION 21 - Binding Effect	25
SECTION 22 - Jurisdiction	26
SECTION 23 - Notices	26
SECTION 24 - Counterparts	27
SECTION 25 - Entire Agreement	28
SCHEDULE A	29
SCHEDULE B	30

CHANNEL COORDINATION
AND CHANNEL LEASE AGREEMENT

On this 6th day of August, 1986, Trans Video Communications, Inc. ("TVC"), a not-for-profit corporation affiliated with The Roman Catholic Diocese of Brooklyn, New York (the "Diocese") and duly organized under the laws of the State of New York, and Ultravision, Inc. ("Ultravision"), a corporation duly organized under the laws of the State of Delaware, enter into this Channel Coordination and Channel Lease Agreement ("Agreement").

Recitals

A. TVC is the licensee of Instructional Television Fixed Service ("ITFS") Stations, KNZ-69 at Bishop Ford High School, Brooklyn, New York, KNZ-70 at The Mary Louis Academy, Jamaica Estates, Queens, New York, KZE-20 at Lefrak Plaza, Queens, New York, KVS-31 at St. Cecelia's Roman Catholic Church, Greenpoint, New York, and WHR-691 at Confucius Plaza, Chinatown, New York. TVC operates its present ITFS system using B and F Group Channels. KNZ-69, KZE-20 and WHR-691 operate on the ITFS B Group Channels. KNZ-70 and KVS-31 operate on the ITFS F Group Channels. TVC's current system has excess capacity that it wishes to lease. Furthermore, by modernizing its facilities, TVC can increase their capacity.

B. Ultravision is the successor in interest to the Grand MMDS Alliance New York F/P Partnership, which is the tentative selectee for the Multichannel Multipoint Distribution Service ("MMDS") authorization for the F Group Channels in the New York

CMSA. Ultravision wishes to provide 24 hours per day omni-directional MMDS service to the greater New York City area on its F Group Channels without causing harmful interference to TVC's co-channel ITFS use of the F Group Channels. This can be done through mutual cooperation and support by modernizing TVC's ITFS B Group Facilities and co-locating with Ultravision at a new centrally located transmission point. This will enable TVC to meet its ITFS needs with its B Group Channels and to go dark on its F Group, thus freeing the use of the F Group Channels for 24 hour omni-directional use by Ultravision for its MMDS services. Therefore, TVC would go on a stand-by basis at its current locations for the F facilities. Ultravision also wishes to lease additional transmission capacity on TVC's compatible B Channel ITFS facilities to supplement the capacity of its MMDS system.

C. The parties recognize that the Federal Communications Commission ("FCC") expects the MMDS selectee and the ITFS licensee of the reallocated channels to negotiate in good faith to mutually accommodate each other's communications requirements and provide for the more efficient use of the radio spectrum. Report and Order in Gen. Docket No. 80-112, 94 FCC 2d 1203 (July 15, 1983); Memorandum Opinion and Order on Reconsideration in Gen. Docket No. 80-112 (June 5, 1984).

THEREFORE, in consideration of the mutual promises, conditions and obligations contained in this Agreement and for other good and valuable consideration, the parties agree as follows:

Terms of Agreement

1.0. Transmission facilities. Subject to the conditions of this Agreement and the approval of the FCC, the parties shall construct new transmission facilities at a mutually agreed upon high rooftop location in Manhattan ("New Transmission Point" or "NTP"). The new transmission facilities will consist of the transmitters, antennas and associated equipment necessary to transmit the full complement of B ITFS and F MMDS channels. The construction and operation of these facilities will be as follows:

1.1. TVC will be solely responsible for purchasing, operating and maintaining the B Group Channel transmitters and associated equipment (the "TVC ITFS facilities"), except as specifically provided elsewhere in this Agreement.

1.1.1. Ultravision will offer to finance at commercial terms and market rates similar to those offered by Chase Manhattan Bank for like loans TVC's acquisition and construction of the TVC ITFS facilities. TVC will hold the title to the TVC ITFS facilities.

1.1.2. Ultravision will pay all costs incurred by TVC (including reasonable legal, engineering and installation costs) in moving TVC's current main transmission point for the B Group Channels from Bishop Ford High School to the NTP. This section will not, however, limit in any way TVC's

responsibility for operating and maintaining these channels as provided in paragraph 1.1.

1.1.3. TVC will be solely responsible for the acquisition and installation of equipment needed for TVC to establish a studio-transmitter link ("STL") between Bishop Ford High School and the NTP. Ultravision will be solely responsible for the cost of such equipment and its installation. TVC will hold title to the STL Equipment and will be the licensee of the facility.

1.1.4. Ultravision will pay for the costs of all necessary relocation, reorientation or re-engineering of TVC's receive sites required by the move of the B Group Channels to the NTP. All of this work shall be subject to FCC approval, if necessary. This responsibility includes but is not limited to the reorienting of receive antennas, changing of down converters, and changing of towers. Ultravision shall undertake all necessary efforts to obtain as good a quality signal at TVC's receive sites as was previously available.

1.2. Ultravision shall be solely responsible for purchasing, operating and maintaining the F Group Channel transmitters, antennas and associated equipment (the "Ultravision MMDS facilities"). Ultravision will be the sole owner of and will be solely responsible for the Ultravision MMDS F Group facilities.

1.3. TVC and Ultravision pledge their best efforts to select compatible transmitters, antennas and other equipment. Each agrees to share engineering analyses of equipment and marketing effects of different equipment before deciding what

equipment to purchase. In order to monitor the quality and reliability of transmission service, both TVC and Ultravision shall share data from their field testing at home receiving sites and other relevant engineering information.

1.4. During the term of this Agreement and any renewal thereof, Ultravision will be solely responsible for obtaining and paying for rooftop leases and equipment room leases at the NTP for TVC's ITFS B Group facilities. The rooftop and equipment room leases for the TVC ITFS B Group facilities will be in the name of TVC and will provide, subject to the ability to obtain such terms from the lessor of the NTP, that TVC may terminate the rooftop and equipment room leases for the TVC ITFS B Group facilities by providing no more than three-months notice. In the event that TVC is unable to obtain such terms from the lessor of the NTP, the rooftop and equipment room leases for the TVC ITFS facilities will be in the name of Ultravision; TVC, at its sole discretion, shall sublet the rooftop and equipment room from Ultravision. The sublease shall provide that TVC may terminate the sublease by providing no more than three-months notice to Ultravision. TVC's right to terminate the rooftop and equipment room leases is permitted only to the extent that relocation or termination is permitted in Sections 1.6 and 17, respectively.

1.5. Ultravision shall have the sole responsibility to provide engineering to insure that neither the ITFS nor the MMDS facilities at the NTP, as constructed, generate adjacent or co-channel interference to neighboring facilities that is unacceptable under FCC rules. Neighboring facilities include but are

not limited to the following: Trenton, N.J. (F-3); The Roman Catholic Archdiocese of New York (A1-4, E1-4); The Roman Catholic Diocese of Rockville Centre, on Long Island, N.Y. (A1-4, B1-4, E1-4); Plainview School District, Long Island N.Y. (B1-4); Mercer County, New Jersey (B1-4).

1.6. After relocating to the NTP, TVC shall not relocate the transmission point for the ITFS B Group Channels without the express written consent of Ultravision. Ultravision may relocate the F Group MMDS facilities to meet FCC requirements or a substantial business need or opportunity. TVC will have the right to approve any such new location which approval shall not be unreasonably withheld. Both parties agree that any such move will take place at a time that will not cause a disruption on the B Group ITFS facilities providing service to the schools. At TVC's option, Ultravision will relocate the TVC ITFS B Group facilities transmission point to such new location. If the TVC B Group ITFS facilities are moved to a new location, Ultravision will pay the costs of any new equipment required as a result of the move, but not the cost of new B Group transmitters. Ultravision will offer to finance at commercial terms and market rates similar to those offered by Chase Manhattan Bank for like loans the acquisition of any new B Group transmitters purchased by TVC in connection with the move. Ultravision will pay the costs of modifying no more than 240 diocesan receive sites to receive the B Group channels signal from the new location.

2.0. Regulatory cooperation. Both parties shall cooperate with one another and shall undertake all reasonable efforts

necessary to secure the following FCC authorizations, if necessary to provide the services contemplated under this Agreement:

- (i) approval of this Agreement;
- (ii) approval of TVC's modification of its ITFS licenses to permit TVC's retention of Mary Louis (KNZ-70) and St. Cecilia (KVS-31) licenses on a stand-by basis as set forth in Section 3.1 and relocation of Bishop Ford (KNZ-69) to transmit on the B Group Channels from the NTP;
- (iii) grant of Ultravision's MMDS construction permit and operating license to transmit omnidirectionally on a twenty-four hour basis on the F Group Channels from the NTP;
- (iv) grant of an STL from Bishop Ford High School to the NTP;
- (v) grant of Special Temporary Authority to transmit from the NTP on the B Group Channels prior to July 1, 1987 in order to reorient the Diocesan receive sites;
- (vi) authority for TVC to reorient and modify all its necessary receive sites;
- (vii) grant of authority for Ultravision to transmit from the NTP, in a manner that does not cause harmful interference to TVC's operations, on a part-time Omnidirectional basis and on a full-time directionalized basis on the F Group MMDS Channels, prior to the reorientation of the Diocesan receive sites and the commencement of regular, full-time operation; and
- (viii) grant of authority for TVC to transmit Ultravision's programming on the B Leased Group Channels from the NTP during the leased hours (per section 4.1) prior to the relocation of Bishop Ford (KNZ-69).

Each party shall be responsible for paying its own costs in securing said authorizations, except as set forth to the contrary

elsewhere in this Agreement. All of the above applications shall be filed with the FCC by September 1, 1986, if possible.

2.1. TVC will retain its current licenses to transmit on the B Group channels at Lefrak Center (KZE-20) and at Confucius Plaza (WHR-691). It is understood by the parties that Channels B-3 and B-4 at these transmission points should not be used in a way that causes harmful interference to the main signal from the NTP and shall cease to operate if there is interference during the leased channel time.

3.0. Operation of facilities. As soon as practicable following the construction of the new facilities described in Section 1, TVC will begin transmitting on the TVC ITFS B group facilities and Ultravision will transmit on the Ultravision MMDS Group F facilities, each operating pursuant to its own FCC authorization. Whenever Ultravision begins operation of the Ultravision MMDS Group F facilities from the NTP on a 24 hour full time basis, TVC will cease to operate on the F Group Channels from all locations, and will not lease any capacity to a third party for operation on the F Group Channels from any location.

The "start date" of the lease term shall be July 1, 1987. Notwithstanding such, Ultravision may commence part-time transmission on the leased B Group Channels at any time, subject to FCC approval, prior to the start date. Ultravision may also commence full-time transmission on the leased B Group Channels, subject to FCC approval, upon completion of reorientation of TVC's receive sites. Part-time transmission

shall consist of 128 hours or less per week. Ultravision shall not pay any additional monies as a result of part-time or full-time transmission on the leased B Group Channels prior to July 1, 1987.

Both parties recognize that the overwhelming majority of TVC's receive sites consist of schools. Both parties will cooperate in the reorientation to cause the least disruption of service to the schools. By September 1, 1986, TVC will provide, as needed, Ultravision with a description of each receive site, including the following information: address of site; building diagram of access to equipment and antennas; inventory of equipment, antennas and towers; and name and telephone number of contact person. Ultravision commits to making every reasonable effort to reorient the Diocesan receive sites during the regularly scheduled vacations (Christmas, Energy Week, Easter Week and Summer) and weekends. TVC consents to Ultravision completing its reorientation of Diocesan receive points at other times, including, if necessary, disruption of service, to the extent required to complete reorientation.

TVC, at Ultravision's request, agrees to undertake the reorientation set forth above provided that Ultravision pays to TVC the costs of such.

3.1. During the term of this Agreement and the term of any renewal by TVC and Ultravision, TVC will, at its sole discretion, subject to FCC approval, retain on a stand-by basis both its present F Group Channel licenses for stations KNZ-70 and KVS-31 at Mary Louis and St. Cecilia, respectively.

3.2. All personnel engaged by TVC or Ultravision to operate the transmission facilities shall possess the appropriate technical qualifications required by the regulations of the FCC. All operation of the transmission facilities shall be in accordance with applicable FCC regulations.

3.3. TVC and Ultravision shall permit persons authorized by the other to have access to each of their facilities as may be required for the performance of this Agreement. All such persons when in such facilities shall be under the exclusive direction and control of the party who is licensed by the FCC to operate the facility. Arrangements concerning access shall be made by mutual agreement of the general managers of TVC and Ultravision.

3.4. Ultravision and TVC recognize that each party is responsible to operate its MMDS F Group facilities and ITFS B Group facilities, respectively, at all times in compliance with the rules, and regulations and policies of the Federal Communications Commission and the requirements of the Federal Communications Act of 1934 as amended. To this end, Ultravision and TVC commit their best efforts to cooperate with each other so that each may ensure that their facilities meet that responsibility. Both agree not to take any actions that will interfere with the other's ability to comply with the rules, regulations and policies of the FCC and the Federal Communications Act of 1934 as amended.

4.0. Leased Channels. Beginning on July 1, 1987, or sooner as set forth elsewhere, Ultravision shall have the right

to use and lease from TVC (as set forth in section 4.1) channels B-3 (2530-2536 MHz) and B-4 (2542-2548 MHz) on the TVC ITFS B Group facilities (the "Leased B Channels"). If sooner than July 1, 1987, then there will be no additional lease payments and no change in the July 1 start date of the lease or in the term of the Agreement. Each of the Leased B Channels includes the bandwidth needed to transmit a full color television signal, including stereo sound if possible, and fifty percent of the additional bandwidth available for both the subcarriers and the Vertical Blanking Interval ("VBI").

4.1. Ultravision shall be entitled to transmit programming over the B Group Leased Channels: (i) on a full-time basis (24 hours a day) on Saturdays and Sundays from September through June and everyday during July and August; and (ii) on a part-time basis (4:00 p.m. - 8:00 a.m.) on all other days.

4.2. TVC retains the right to: (A) all time on the Leased Channels other than air time leased in paragraph 4.1, and (B) such additional (recaptured) time as may be required to comply with the rules, regulations and policies of the FCC as they may exist from time to time.

If the FCC requires the recapture of time from that leased to Ultravision as specified in Section 4.1, there shall be a pro rata reduction in the Annual Minimum payments as well as any payments from the Shared Income Channel.

If the FCC requires the recapture of time from that leased by Ultravision as specified in Section 4.1 and such recapture significantly reduces the use, value or marketability

of any channel, the parties agree that the lease for that channel can be cancelled by Ultravision without penalty in accordance with Section 17.1.

5.0. Payment. Ultravision will pay to TVC as follows:

a) a reservation fee of \$75,000 payable on January 1, 1987 or whenever Ultravision begins transmitting on a full-time basis, whichever date is sooner.

b) an additional reservation fee of \$53,000 payable when Ultravision has received a commitment for adequate financing or begins transmitting on a full-time basis, whichever date is sooner; and

c) the amounts set forth in Schedule A, subject to Ultravision's receiving adequate financing and TVC receiving the necessary approvals from the FCC to begin transmitting on the Leased B Channels from the NTP.

If, however, payments do not commence by or on October 1, 1987, then TVC, upon one (1) month's written notice, shall have the option to cancel this agreement. Ultravision may cure within said one month by paying the October 1, 1987 payment (and commence all subsequent payments when due) and this agreement shall not be cancelled.

5.1. Lease payments described in Schedules A and B are due monthly, within 20 days of the end of the month for which payment is required. Payments related to the Shared Income Channel and the Home and Hospital Service Channels shall be accompanied by an accounting that specifies the amount of Shared Income Channel and the Home and Hospital Service Channels

subscriber fees collected and programming costs incurred in the preceding month. In the event that any amount due to TVC from Ultravision remains unpaid at that time, a five percent penalty will be added to the amount due. If any part of the payment, including the penalty, remains unpaid ten days after written notice, TVC may demand that Ultravision deliver to TVC a Letter of Credit payable to TVC, drawn on a bank with a banking office in New York City (a "New York City bank"), in the amount of the payment and penalty then due. Said Letter of Credit shall be delivered to TVC within seven (7) business days of receipt by Ultravision of TVC's demand. Said Letter of Credit is payable ninety (90) days after the date the payment was due. A similar procedure shall be used for any additional failures by Ultravision to make prompt payments. If Ultravision owes TVC fees for three or more consecutive months, then TVC may demand delivery of an additional Letter of Credit payable to TVC for \$250,000 drawn on a New York City bank. Said letter of Credit shall be delivered to TVC within seven (7) business days of receipt by Ultravision of TVC's demand. Said Letter of Credit is payable ninety (90) days after the date the payment was due.

5.2. Nothing contained in this Agreement shall be construed as an obligation on the part of Ultravision or TVC to establish or set aside monies in a separate account or to hold any such monies, account or fund in a fiduciary capacity for the benefit of the other prior to actual payment of amounts due pursuant to the terms of this Agreement.

6.0 Programming. Ultravision shall have full control over the programming transmitted on the Ultravision MMDS F Channel facilities.

6.1. The parties understand that Ultravision will transmit on the Leased B Channel Facilities only programming that is family oriented, would not jeopardize TVC's reputation in the community, and is permissible under the laws of the United States and the regulations of the Federal Communications Commission ("FCC"). All program material transmitted by Ultravision on the Leased B Channel Facilities shall be subject ultimately to the direct and complete control of TVC to the extent required to assure compliance with FCC rules, regulations and policies, and the Federal Communications Act of 1934 as amended and with this Agreement.

6.2. TVC specifically reserves the absolute right, pursuant to the provisions set forth below, to refuse to transmit any program on the Leased B Channel Facilities that TVC in its sole discretion determines is pornographic, obscene, x-rated, or is scandalous to the Roman Catholic Church or Faith ("objectionable" programming).

6.3. No programming shall be transmitted on the Leased B Channels which gives an endorsement by Ultravision of any candidate for an elective office of the United States, a state government or any other governmental body.

6.4. TVC's failure to object to an initial transmission of objectionable programming shall not constitute a

waiver of its right to refuse to retransmit the programming at a later time.

6.5. The parties shall cooperate to avoid TVC's having to exercise its right to refuse transmission on the Leased B Channels. The parties acknowledge that mutual cooperation of the parties is beneficial to each party.

7.0. Program Review Procedures. No less than thirty days in advance of transmission for each calendar month, Ultravision will provide TVC with a schedule and synopsis of its proposed programming ("Program Information") on the Leased B Channels. When this Program Information is not available to Ultravision in a timely fashion, Ultravision will provide such information as soon as it becomes available.

7.1. If the Program Information is provided to TVC thirty days in advance, TVC shall notify Ultravision within fourteen days of its receipt if TVC determines that any of the programming is objectionable.

7.2. If the Program Information is provided to TVC less than thirty days in advance of the date of the intended transmission, TVC will notify Ultravision as soon as is reasonably practical whether or not the programming is objectionable. Nothing herein shall be deemed to require TVC's preview of live or taped news or public affairs or other live material, but TVC reserves the right to preview programming to the extent reasonable and practical.

7.3. If the Program Information is not disclosed to TVC or is incorrect or incomplete, TVC shall not be required to

give any advance notice to Ultravision before refusing to transmit the programming. TVC will, however, immediately notify Ultravision's general manager of TVC's refusal to transmit any programming.

7.4. TVC shall provide notice by telephoning Ultravision's general manager as soon as TVC decides that any programming is objectionable.

8.0. Non-competition. TVC agrees not to transmit programming or to lease or sub-lease any channel capacity on its ITFS Facilities for the transmission of programming that is competitive with programming transmitted by Ultravision. For the purpose of this provision, "programming transmitted by Ultravision" includes programming transmitted over Ultravision's F Channel MMDS facilities, programming provided by Ultravision for transmission over TVC's Leased B Facilities, or programming transmitted or caused to be transmitted by Ultravision over other leased ITFS facilities. The transmission of predominantly ethnic programming shall not constitute programming that is competitive with that of Ultravision. In addition, the transmission of predominantly pastoral, educational and instructional programming or any programming to Catholic institutions or entities listed in The Official Catholic Directory (except for competing pay per view educational programs to Ultravision subscribers) by TVC shall be deemed for purposes of this Agreement not to be competitive with that of Ultravision.

8.1. Ultravision agrees not to transmit programming that competes with the predominantly ethnic programming

transmitted by TVC or its lessees over the B Channel ITFS facilities. Ultravision also agrees not to transmit programming that competes with the ^{Existing}predominantly pastoral, educational and instructional programming ^{of TVC,} or any programming of TVC to Catholic institutions or entities listed in The Official Catholic Directory. H412

8.2. Nothing contained in this Agreement shall require TVC to breach any existing leases with respect to the contents of the lessee's programming. Nonetheless, TVC shall be obligated to enforce any existing leases with regard to non-competition in a manner that is consistent with this Agreement, including, among other things, the requirement, if any, that its lessees not sublease capacity to any person or entity that competes with Ultravision.

9.0. Shared Income Channel. Ultravision shall program one of the Leased B Channels with a premium, family-oriented program service mutually agreeable to TVC and Ultravision (the "Shared Income Channel"). Revenue from this channel shall be shared between Ultravision and TVC in accordance with the attached Schedules A and B. Nothing in this section shall limit TVC's obligation to operate its system in compliance with the FCC rules, regulations and policies and the Federal Communications Act of 1934 as amended.

9.1. For a period of forty-eight months after the creation of books or records, but not exceeding twelve months following termination of this Agreement, Ultravision shall keep, maintain and preserve complete and accurate records and accounts,

including all invoices, correspondence, ledgers, financial and other records, pertaining to TVC's fees and rental hereunder. Such records and accounts shall be available for inspection at Ultravision's offices during normal business hours, by TVC or its nominee (who shall be a Certified Public Accountant). TVC shall provide Ultravision with five business days advance written notice of its intent to inspect said records and accounts prior to being allowed to do so. Ultravision shall not cause interference to TVC or its nominee in the exercise of its right of inspection. TVC's exercise at any time of the right to inspect or the acceptance by TVC of any statement or remittance tendered by Ultravision or on behalf of Ultravision shall be without prejudice to any rights or remedies of TVC and shall not preclude TVC thereafter from disputing the accuracy of any such statement or payment. All information obtained by TVC or its nominee during said inspection shall be confidential and may not be disclosed by TVC or its nominee to any third party without Ultravision's prior consent.

9.2. It is expressly understood by the parties hereto that the programming on the Shared Income Channel and on the Home Service Channel shall be available only to paid subscribers.

10.0. Combanding. Ultravision and TVC currently do not intend to comband any of the channels that are the subject of this Agreement. Ultravision specifically agrees not to comband its F Group Channel facilities without offering to also comband the B Group Channel facilities. If the parties decide to request

FCC Authority to comband their respective facilities and said FCC Authority is granted, the following provisions shall apply:

10.1 Ultravision will pay all costs of equipping and modifying TVC's then-operational ITFS receive sites to enable such sites to receive all of the combanded B Group Channels. Ultravision's obligations under this provision extend only to Diocesan receive sites, of which there is a maximum of 240.

10.2. Ultravision will offer to lease combanded transmitters to TVC under a standard equipment lease at commercial terms and market rates similar to those offered by Chase Manhattan Bank for like loans.

10.3. The resulting channels will be channel-mapped if possible to provide Ultravision with two additional channels available on a 24-hour-a-day basis, at no additional charge. This channel mapping (if possible) will provide Ultravision with a total of two full-time channels and two part-time channels. The B Group Channels that are not part of this lease shall continue to be used exclusively by TVC or its lessees.

10.4. Of the four combanded B Group Channels leased to Ultravision, one of the full-time channels will be used to provide the Shared Income Channel service that had previously been provided on a part-time channel. Ultravision agrees, with TVC's approval, to programming this full-time channel with The Disney Channel program service, if available, or another mutually agreeable premium entertainment service. The two part-time channels will be used, if development efforts are successful, for a Diocesan Hospital Service ("Hospital Service") and a Diocesan

Home Service ("Home Service"). The Hospital Service will combine Diocesan programming, medical training programming, and patient entertainment programming and the Home Service will combine Diocesan programming and entertainment programming. The other, full-time channel will be used for programming selected solely by Ultravision consistent with this agreement.

10.5. The parties will use their best efforts to establish and market the Hospital and Home Services as a saleable package of public service and entertainment programming. TVC is expected to provide approximately 50-60 hours per week of the programming for each service. Net revenues from the services will be shared equally by TVC and Ultravision. Payments for the Home and Hospital Service channels are in addition to any other monies payable to TVC or to be shared by TVC pursuant to this Agreement.

10.6. Each of the four combanded channels leased by Ultravision will continue to include the bandwidth necessary to transmit a full color television signal, including stereo sound if possible, and fifty percent of both the additional bandwidth available for subcarriers and VBI.

10.7. The term "combanding" refers to the technology for distributing two video and audio signals without material degradation over the 6 MHz of bandwidth normally required for one video and audio signal, or any other similar technology, whether offered by General Electric or some other company.

11.0. Promotion. Neither TVC nor Ultravision obligates itself to promote the other's services. As to the Home and

Hospital Services, if and when either is established, Ultravision shall make its subscribers aware of these programs through Ultravision's usual promotional literature and advertising, which shall refer to TVC's programs with the frequency customary for the type of program, and TVC shall aid in marketing these channels.

12.0. Names and Symbols. Ultravision shall not make use of the name or symbols of the Diocese in any manner whatsoever, nor shall it use any other names or symbols of the Roman Catholic Faith in connection with any of its programming or in any of its written or oral advertising, brochures, pamphlets, stationery, or other written matter, except with the prior written authorization of TVC. TVC will not unreasonably withhold such authorization.

13.0. Term. This Agreement will become effective immediately upon signing and will continue in effect for nine years after July 1, 1987.

14.0. First Renewal. No earlier than one year prior to the expiration of the term of this Agreement, if no offer acceptable to TVC has been received by TVC to rent the Leased Channels, then TVC must, in writing, offer a six year extension of this Agreement to Ultravision, at the payment schedule set forth in Schedule B. Ultravision agrees to accept such an offer. The parties, however, if they wish, may negotiate new mutually agreeable terms. Any such agreement shall be in writing.

14.1.0. If TVC receives a bona fide offer to lease or otherwise use the Leased Channels from a third party within a year before the expiration of the term of this Agreement, and if

TVC proposes to accept said offer, TVC shall give Ultravision written notice thereof together with a copy of the proposed lease for purposes of providing Ultravision with a Forty-Five Day Right of First Refusal. Notwithstanding TVC's obligation to forward a copy of such proposed lease, non-substantive changes in the proposed lease may be made after giving Ultravision notice as set forth herein, without requiring a new period for the right of first refusal to be extended to Ultravision.

14.1.1. If Ultravision delivers to TVC written notice within 45 days after receipt of the proposed lease that Ultravision elects to renew this Agreement for the same term and rental set forth in the proposed lease, such agreement to renew shall immediately become binding upon Ultravision and TVC. The parties shall thereafter sign and exchange copies of a renewal of this Agreement, with the renewal commencing on the expiration of the term of this Agreement then in effect. If Ultravision declines to match the third party offer or fails to notify TVC within the above stated 45 day period that it is exercising its right of first refusal then TVC may accept the offer to lease the channels from the third party.

14.1.2. It is expressly agreed that for an offer to be "bona fide," the terms for the lease of the two leased B Group Lease Channels must be similar to the financial and monetary terms to those in this Agreement and the minimum payments proposed by the third party must be no less than 125 percent and no more than 150 percent of the Annual Minimum payment for the ninth

year of this Agreement and the term must be for a minimum of six years.

14.1.3. TVC may not propose to accept an offer that is not bona fide.

14.1.4. If Ultravision renews this agreement, pursuant to this section, all of the terms (excepting the financial and monetary payment schedule) in the existing agreement will remain the same and continue in full force and effect.

14.2. For the purposes of this Agreement, "third party" refers to any party other than Ultravision, TVC, the Diocese or any affiliated person or entity.

15.0. First Right of Refusal. At the end of the first renewal term and of each subsequent renewal term, Ultravision shall have the right of first refusal to renew at the same price and terms as proposed in any offer by a third party, except as modified to permit Ultravision to continue its customary operations.

15.1. For the purposes of this Section, TVC shall have no obligation to negotiate with or accept an offer from any party if TVC decides in its sole discretion to discontinue the leasing of capacity on its B Group ITFS facilities. If TVC decides to discontinue the leasing of its ITFS channels, TVC shall not use the channels to compete (as defined in Section 8.0) with Ultravision for a period of two years after the expiration of this Agreement or of any renewal term.

16.0. Conditions. This Agreement will terminate and cease to be of any further effect or force if any FCC approval

reasonably necessary for TVC to begin operations on the ITFS B Group facilities at the NTP and for Ultravision to begin operations on the Ultravision MMDS F Group facilities, including approval of this Agreement to the extent required, is denied by final order. For purposes of this Agreement, a final order shall mean an order that is effective and no longer subject to administrative or court reconsideration, review, appeal or stay.

17.0. Termination. Either party may terminate this Agreement, without liability of any kind to the other party, if any of the conditions to this Agreement is not materially satisfied within two years of the date of this Agreement. Furthermore, each party may terminate this Agreement, without waiver of any claims against the other party, if the other party commits a material breach of this Agreement and does not cure the breach within 30 days of being provided with written notice thereof by the nonbreaching party. A waiver by either party of a breach of any provision of this Agreement shall not constitute a waiver of any preceding or subsequent breach of the same provision or of any other provision.

17.1. In the event the FCC takes any action which substantially restricts TVC's or Ultravision's ability to substantially perform its obligations under this Agreement, this Agreement may be terminated by either party upon sixty days prior written notice to the other party. In this event, this Agreement shall have no further force or effect and thereafter neither party shall have any further obligation or liability to the other party, unless the FCC's action is due to a party's negligence or

malfeasance. Any outstanding payments due at this time will be paid.

17.2. If Ultravision is compelled to terminate this Agreement due to business difficulties, as it may determine at its sole discretion, the damages shall be fixed, liquidated and determined at \$250,000. This sum has been arrived at for the purpose of liquidating the amount of said damages and not as a penalty.

18.0. Severability. If any part of this Agreement is determined to be in violation of any applicable law, rule or regulation, the remainder of this Agreement shall continue in full force and effect, provided that the obligations and benefits of the parties hereunder are not materially changed.

19.0. Indemnification. Each party will indemnify, defend and hold the other free and harmless of, from and against any and all claims, liability, loss or damage whatsoever on account of any loss, injury, libel, slander, death, or damage arising in any way out of the use by the other party of the ITFS B Group and MMDS F Group Channel facilities subject to this Agreement except those arising by reason of negligence or willful act of the other party, its agents or employees.

20.0. Insurance. Each party shall maintain libel and slander insurance in an amount which is customary (similar to cable) for their respective services (MMDS for Ultravision and ITFS for TVC).

21.0. Binding Effect. This Agreement shall bind and inure to the benefit of the parties and their successors in interest

and permitted assigns. This Agreement may not be assigned either directly or by transfer of control by either party without the prior written consent of the other party, which consent shall not be unreasonably withheld. TVC may refuse such consent if TVC's privity with the assignee or transferee would damage the reputation of TVC or the Diocese. Any assignment not in conformity with this paragraph shall be null and void.

21.1. Ultravision shall not sub-lease any Leased Channel B Group Time without the prior written consent of TVC, which consent shall not be unreasonably withheld. TVC may refuse such consent if TVC's association with the sub-lease would damage the reputation of TVC or the Diocese. Any such sub-lease shall expressly state that all applicable program controls of TVC are preserved.

22.0. Jurisdiction. This Agreement shall be construed and enforced in accordance with the laws of the State of New York.

23.0. Notices. Unless specifically noted to the contrary, all notices shall be sent by hand or by express delivery, return receipt requested. Notices will be effective upon receipt.

Notice to TVC must be sent to:

Reverend Monsignor Michael J. Dempsey
Executive Director
Trans Video Communications, Inc.
1712 Tenth Avenue
Brooklyn, New York 11215
(718) 499-9705

with a copy to:

HURLEY, KEARNEY & LANE
32 Court Street
Brooklyn, New York 11201
Attn: Richard J. Cea, Esq.
(718) 852-5900

Director of Pastoral Communications
of the R.C. Diocese of Brooklyn
c/o Secretary to the Bishop
75 Greene Avenue
Brooklyn, New York 11202

Notice to Ultravision must be sent to:

Vincent J. Hartnett
Nicholas Mastrorilli
Cacomm, Inc.
508 Washington, Boulevard
P.O. Box 163
Sea Girt, New Jersey 08750
(201) 449-9352

Thomas Domencich
Thomas Domencich, Inc.
138 Main Street
Montpelier, Vermont 05602
(802) 229-4060

Henry M. Zachs
d/b/a Massachusetts-Connecticut
Mobile Telephone Company
40 Woodland Street
Hartford, Connecticut 06105
(203) 278-1070

with a copy to:

John Q. Hearne
Bruce D. Jacobs
Fisher, Wayland, Cooper & Leader
1255 23rd Street, N.W.
Suite 800
Washington, D.C. 20037
(202) 659-3494

24.0. Counterparts. This Agreement may be executed in one or more counterparts, which shall have the same effect as if all signatures appeared on the same instrument.

25.0. Entire Agreement. This Agreement contains all of the terms agreed upon by the parties with respect to the matters addressed. All prior understanding, whether written or oral, shall be merged herein. This Agreement may not be modified except in writing signed by both parties.

Accordingly, the parties hereby execute this Agreement on the first date set forth above.

TRANS VIDEO COMMUNICATIONS, INC.

BY: Rev. Michael J. Dempsey
Rev. Msgr. Michael J. Dempsey
Executive Director

ULTRAVISION, INC.

BY: Henry M. Zachs
Henry M. Zachs
President

ATTACHMENT C

Section I UNITED STATES OF AMERICA
FEDERAL COMMUNICATIONS COMMISSION

APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE
CHANGES IN AN INSTRUCTIONAL TELEVISION
FIXED AND/OR RESPONSE STATION(S)
AND LOW POWER RELAY STATION(S)

INSTRUCTIONS

A. This form is to be used in applying for authority to construct a new instructional television fixed and/or response station(s) and low power relay stations or to make changes in an existing station. This form consists of this part, Section I, and the following sections:

Section II. Legal Qualifications of Applicant
Section III. Financial Qualifications of Applicant
Section IV. Statement of Program Service of Applicant
Section V. Engineering Data
Section VI. Response Stations
Section VII. Low Power Relay Stations

B. PREPARE THREE COPIES of this form and all exhibits, and ONE ADDITIONAL COPY OF SECTIONS I and V and related exhibits. Sign one copy of Section I. Prepare three additional copies of Sections VI and VII, if appropriate. File all of the above with the Federal Communications Commission, Washington, D. C. 20554. The extra copy of Sections I and V will be forwarded to the appropriate subcommittee of the Committee for the Full Development of the Instructional Television Fixed Service and their comments and recommendations solicited.

C. Number exhibits serially in the space provided in the body of the form and list each exhibit in the space provided on page 2 of this Section. Show date of preparation of each exhibit, antenna pattern, and map.

D. The name of the applicant stated herein shall be the exact corporate name, if a corporation; if an unincorporated association, the exact name of the association; if a governmental or public educational agency, the exact name of such agency. The applicant must notify the Commission of any change of address.

E. A single application should be used for more than one channel if the associated transmitters are to be located at a common antenna site. Transmitters having different transmitting antenna locations must be filed on SEPARATE applications.

F. Information called for by this application which is already on file with the Commission need not be refiled in this application provided (1) the information is now on file in another application or FCC form filed by or on behalf of this applicant; (2) the information is identified fully by reference to the file number (if any), the FCC form number and the filing date of the application or other form containing the information and the page or paragraph referred to, and (3) after making the reference, the applicant states: "No change since date of filing." Any such reference will be considered to incorporate into this application the application or other form referred to in its entirety. Do not incorporate by reference any material which is not to be open to the public.

G. This application shall be personally signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer, if the applicant is a corporation; by a member who is an officer, if the applicant is an unincorporated association; by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction, if the applicant is an eligible government entity; or by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. The attorney shall, in the event he signs for the applicant, separately set forth the reason why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.

H. Before filing out this application, the applicant should familiarize himself with the Communications Act of 1934, as amended, Parts 1, 2, 17 and 74 of the Commission's Rules and Regulations.

BE SURE ALL NECESSARY INFORMATION IS FURNISHED AND ALL PARAGRAPHS ARE FULLY ANSWERED. IF ANY PORTIONS OF THE APPLICATION ARE NOT APPLICABLE, SPECIFICALLY SO STATE. DEFECTIVE OR INCOMPLETE APPLICATIONS MAY BE RETURNED WITHOUT CONSIDERATION.

Approved by OMB
3060-0062
Expires 4-30-85

FOR COMMISSION USE ONLY

FILE

File No.

Name and address of applicant (See Instruction D)

Name Trans Video Communications, Inc.

Address 1712 Tenth Avenue

City Brooklyn NY

ZIP Code 11215

State FCC
OFFICE OF THE SECRETARY

Send notices and communications to the following-named person at the post office address indicated:

Name Monsignor Michael J. Dempsey*

Address 1712 Tenth Avenue

City Brooklyn NY

ZIP Code 11215

State

Requested facilities for instructional television fixed station (See Instruction E):

a. Channel No. (s)

b. Principal area to be served:
(School District or other descriptive location)

c. If this application is for fewer than four channels, will application later be made for additional channels, and if so, when is it anticipated that such application will be filed?

2. If authority to make changes in an existing station or authorization is requested: See Ex. I-1
a. File No. and call of authorization:

b. Present facilities:
Channel No. (s):

B1-4 (KNZ-69)

c. Principal area to be served:
Brooklyn and Queens, NY, and parts of

d. If this application is for changes in an existing authorization, complete Section I and any other sections necessary to show all substantial changes in information filed with the Commission in prior applications or reports. In the space below, check Sections submitted herewith and as to Sections not submitted herewith refer to the prior application or report containing the requested information in accordance with Instruction F.

Section No.	Para. No.	Reference (File or Form No. and date)
<input checked="" type="checkbox"/> Section II	All	BPLIF-850311DA
<input checked="" type="checkbox"/> Section III		
<input checked="" type="checkbox"/> Section IV	All	BRIF-810507MA; BPIF-
<input checked="" type="checkbox"/> Section V		
<input checked="" type="checkbox"/> Section VI		
<input type="checkbox"/> Section VII		

3. Have there been any substantial changes in the information incorporated in this application by reference in this paragraph?

YES ☐ NO ☒

If "Yes," submit as Exhibit No. full particulars.

Is this application filed for the purpose of impeding, obstructing, delaying determination on any other application with which it may be in conflict?

YES ☐ NO ☐

If "Yes," submit as Exhibit No. full detailed particulars

Crowell & Moring, 1001 Pennsylvania Ave., Washington, D.C. 20004
FCC 330-P
October 1982

THE APPLICANT hereby waives any claim to the use of any particular frequency or of the ether as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934).

THE APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

THE APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all the exhibits are a material part hereof and are incorporated herein as if set out in full in the application.

CERTIFICATION

I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signed and dated this 28th day of April, 19 87.

TRANS VIDEO COMMUNICATIONS, Inc.
(NAME OF APPLICANT)

Monsignor Michael J. Dempsey
(SIGNATURE)

WILLFUL FALSE STATEMENTS MADE ON THIS FORM
ARE PUNISHABLE BY FINE AND IMPRISONMENT.

U. S. CODE, TITLE 18, SECTION 1001.

Title Executive Director

If applicant is represented by legal and/
or engineering counsel, state name(s)
and post office address(es):

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The principal purpose(s) for which the information will be used is to determine if the benefit requested is consistent with the public interest. The staff, consisting variously of attorneys, accountants, engineers, and application examiners, will use the information to determine whether the application should be granted, denied, dismissed, or designated for hearing. If all the information requested is not provided, the application may be returned without action having been taken upon it or its processing may be delayed while a request is made to provide the missing information. Accordingly, every effort should be made to provide all necessary information. Your response is required to obtain this Authority.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3) AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

EXHIBITS furnished as required by this form:

Exhibit No.	Section and Para. No. of Form	Name of officer or employee (1) by, whom or (2) under whose direction exhibit was prepared (show which)	Official title
I-1	I-2	Monsignor Michael J. Dempsey (2)	Executive Director
II-1	II-11(d)	" " "	" "
III-1	III	" " "	" "
IV-1	IV	" " "	" "
Engineering Exhibit	V & VI	William C. King, Jr. (1)	Engineering Consu

FEDERAL COMMUNICATIONS COMMISSION		Section II, Page 1
LEGAL QUALIFICATIONS OF APPLICANT	Name of Applicant Trans Video Communications, Inc.	FOR COMMISSION USE ONLY File No.
INSTRUCTIONS		
<p>As used in this Section, the words "party to this application" mean: (1) in the case of a corporate applicant with outstanding stock, all officers, directors, stockholders of record, persons owning the beneficial interest in any stock, subscribers to any stock, and persons who voted any of the voting stock at the last stockholders meeting; (2) in the case of any other applicant which is not a governmental or public educational agency, all executive officers, members of the governing board; and owners or subscribers to any membership or ownership interest in the applicant; (3) in the case of an applicant which is a governmental or public educational agency, the members of the governing board and chief executive officers thereof.</p>		
<p>1. Describe clearly and in detail the character and legal nature of the applicant (a corporation, unincorporated legal entity, or public body; a public or private educational institution; a State, county, city or other political subdivision, a board of education, school board or district, board of regents or trustees, or other department or unit of a state or one of its political subdivisions; a nonprofit corporation or unincorporated association formed for the purpose of operating a noncommercial educational broadcasting station) including the State, District, Territory or Possession under the laws of which the applicant is organized.</p>		
<p>2. a. State whether applicant is a nonprofit educational institution. Yes <input type="checkbox"/> No <input type="checkbox"/></p>		
<p>b. If the applicant is a nonprofit educational organization, describe in Exhibit No. _____ how the proposed station will be used for the advancement of an educational program. This does not apply if applicant is applying for change in facilities.</p> <p style="text-align: center;"><u>See BPLIF-850311DA, filed 8/11/85.</u></p>		
<p>3. Submit as Exhibit No. _____ three copies, one of which must be properly certified to</p>		
(a) If applicant is a corporation, the articles of incorporation (or charter) and the by-laws (with amendments to both, if any), certified by the Secretary of State or other appropriate official.		
(b) If applicant is an unincorporated association, or other legal entity, the articles of association or other legal instrument under which applicant is organized showing the purposes thereof, and the by-laws, if any (with amendments to both, if any).		
(c) If applicant is a public educational institution, the laws (and amendments thereof) under which it was created with an appropriate citation as to the source thereof.		
(d) If the applicant is a political subdivision, or a board, department or unit thereof, the laws (and amendments thereof) under which said subdivision, board, department or unit was created with an appropriate citation as to the source thereof.		
<p>4. Indicate specifically by reference to page and paragraph of the articles of incorporation or association, or of the political subdivision, the charter powers relied upon by the applicant to show that it is legally empowered to construct and operate the proposed station.</p>		
<p>5. Are all parties to this application citizens of the United States? Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>If "No," state the name and citizenship of each party who is not a citizen of the United States.</p>		
<p>6. a. Is applicant or any party to this application a representative of an alien or of a foreign government? Yes <input type="checkbox"/> No <input type="checkbox"/></p>		
<p>b. If applicant is a corporation, is more than 20 percent of the capital stock owned of record or may it be voted by aliens or their representatives, or by a foreign government or a representative thereof, or by any corporation organized under the laws of a foreign country? Yes <input type="checkbox"/> No <input type="checkbox"/></p>		
<p>c. If applicant is a corporation and is controlled by another corporation or corporations, is more than 25 percent of the capital stock of such controlling corporation or corporations owned of record or may it be voted by aliens, their representatives, or by any corporation organized under the laws of a foreign country? Yes <input type="checkbox"/> No <input type="checkbox"/></p>		
<p>d. If the answer to any of the foregoing parts of this paragraph is "Yes," submit as Exhibit No. _____ a full disclosure concerning the persons and matters involved.</p>		
<p>7. a. Has the applicant or any party to this application been fully adjudged guilty by a Federal court of unlawfully monopolizing or attempting unlawfully to monopolize radio communications, directly or indirectly, through the control of the manufacture or sale of radio apparatus, through exclusive traffic arrangements, or by any other means, or to have been using unfair methods of competition? (See Section 313 of the Communications Act of 1934, as amended) Yes <input type="checkbox"/> No <input type="checkbox"/></p>		
<p>b. If "Yes," submit as Exhibit No. _____ a full disclosure concerning the persons and matters involved, identifying the court and the proceedings (by dates and file numbers) stating the facts upon which the proceeding was based or the nature of the offense committed, and the disposition of the matter.</p>		

Section II, Page 2

Yes ☐ No ☐

If "Yes", state below the name of such other legal entity, and state how such control, if any, exists and the extent thereof.

See BPLIF-850311DA.

9. Give the following information as to applicant's officers, members of governing board, and holders of 1% or more ownership interest (if any).

(if any).				
Name and Residence	Office Held	Citizenship	Principal Profession or Occupation	By whom appointed or elected
/				

10. Instructional Television Fixed station applicants which are nonprofit organizations rather than governmental bodies or educational institutions submit as Exhibit No. _____ evidence that officers, directors, and members of the governing board are broadly representative of the educational, cultural, and civic groups in the community. This does not apply if applicant is applying for change in facilities.

Section II, Page 3

a. Applicant's control over the station is to be by reason of: (Indicate by check mark)

☐ Lease

☐ Other Authority

See BPLIF-850311DA.

Yes ☐

No ☐

Yes ☐

No ☐

b. Submit as Exhibit No.

See BPLIF-850311DA.

You ☐

No ☐

Yes ☐

No ☐

Yes ☐

No ☐

(1) Name of party
having such interest

(2) Nature of interest or connection (giving dates)

(3) Name of other applicant or
call letters of station

(4) FCC File Number

FEDERAL COMMUNICATIONS COMMISSION				Section III, Page 1
FINANCIAL QUALIFICATIONS OF APPLICANT	Name of Applicant Trans Video Communications, Inc.		FOR COMMISSION USE ONLY File No.	
INSTRUCTIONS				
In the questions that follow, the Commission is seeking information as to contracts and arrangements now in existence, as well as any arrangements or negotiations, written or oral, which relate to the present or future financing of the station; the questions must be answered in the light of this instruction.				
1a. Give estimated costs for installation of facilities and equipment for which application is made. The costs shown for the following must be the costs in place and ready for service, including the amounts for labor, supervision, materials, supplies, and freight. To the extent that all or part of the items below are covered by a contract or contracts containing a single quotation, the details of such contract or contracts shall be stated in lieu of the estimates called for below; but, in any event, the cost figures must represent costs <u>in place and ready for service.</u>				
Transmitter(s) proper including tubes \$ <u>Installation costs</u> Labor \$ Supervision \$ Materials & supplies \$ Freight \$	Transmitting Antenna system(s), including tower, coupling equipment, transmission line \$ See Ex. III-1 <u>Installation costs</u> Labor \$ Supervision \$ Materials & supplies \$ Freight \$	Receiving and distribution system(s) \$ <u>Installation costs</u> Labor \$ Supervision \$ Materials & supplies \$ Freight \$		
Studio technical equipment, microphones, transcription equipment, cameras, etc. \$ <u>Installation costs</u> Labor \$ Supervision \$ Materials & Supplies \$ Freight \$	Acquiring land \$	Acquiring, Constructing or Modifying buildings \$	Other items (state nature) \$	
Total Cost \$				
Give Estimated cost of operation for first year \$				
1b. State the basis of the estimates in (1a.) above.				
1c. The proposed construction is to be financed and paid for in the following manner (including specified statements as to the approximate amount to be met and paid for from each source). The financial plan should provide for any additional construction costs should the actual cost exceed the original estimated cost.				
Existing capital \$	New \$	Loans from banks or others \$	State, County, Municipal appropriations \$	
Donations	Credit, deferred payments, etc.		Other sources (specify)	

FINANCIAL QUALIFICATIONS

Section III, Page 2

1d. Provide full information as to the sources of funds for the first year's operation of the proposed station, including the following:

Source	On hand	Anticipated	Total
(1) State, County, Municipal appropriations			
(2) Schools, colleges, or universities			
(3) Foundations (specify) _____			
(4) Civic Groups			
(5) Individual donations			
(6) Project (production services and contracts, tuition, study guides, non-broadcast activities, etc.)		See Ex. III-1	
(7) Other (specify) _____			
TOTAL			

2. With respect to the funds referred to in Question 1(c) and 1(d) above, furnish information showing the availability of such funds, including:

- a. for governmentally appropriated funds, the date, amount, appropriating body, and object of the appropriation, with any restrictions thereon;
- b. for other than governmentally appropriated funds or Federal grants, submit as Exhibit No. _____ a detailed balance sheet of applicant, showing financial position as at the close of a month within 90 days of the date of application. If the status and composition of any assets and liabilities on the balance sheet are not clearly defined by their respective titles, attach as Exhibit No. _____ schedules which give a complete analysis of such items;
- c. for all applicants, attach as Exhibit No. _____ a copy of the applicant's current annual budget, insofar as it relates to existing broadcasting operation(s).

3. Furnish the following information with respect to the non-governmental applicant only. If the answer is "None" to any or all items, specifically so state:

- a. Amount of funds on deposit in bank or other depository
- b. Name and address of the bank in which deposited
- c. Name and address of the party in whose name the money is deposited
- d. Conditions of deposit (in trust, savings, subject to check, on time deposit, who may draw on account and for what purpose, or other condition)
- e. Whether the funds were deposited for the specific purpose of constructing and operating the station

FEDERAL COMMUNICATIONS COMMISSION

Section IV

STATEMENT OF PROGRAM SERVICE
OF APPLICANT

Name of applicant

Trans Video Communications, Inc.

FOR COMMISSION USE ONLY

File No.

1. Attach as Exhibit No. _____ the applicant's purpose and objective in establishing the proposed station and a statement of proposed program policies. If applicant already has such information on file, indicate file number and detail changes, if any.

See Ex. IV-1.

2. Attach as Exhibit No. _____ a proposed weekly schedule of programs together with a brief description of programs not recognizable by their titles. (It is not expected that the licensee will or can adhere inflexibly in day-to-day operation to the representation made here. However, since such representation will constitute, in part, the basis upon which the Commission acts on the application, time and care should be devoted to the preparation of the reply so that it will reflect accurately the applicant's responsible judgment of his proposed programming policy.) If applicant already has such information on file, indicate file number and detail changes, if any.

NOTE: The following are examples of Program data:

1. Sources of programs are defined as follows:

A local program (L) is any program originated or produced by the station, employing live talent more than 50% of the time, and using the studios or other facilities of the station. A local program recorded or filmed by the station for later transmission shall be classified as local. A program produced by a station and fed to a network shall be classified by the originating station as local. Programs primarily featuring phonograph records, syndicated or feature films or taped or transcribed programs, shall not be classified as local even though a station personality appears incidentally to introduce such material.

A record program (REC) (Radio only), is any program, not falling within the definition of "local" above, which utilizes phonograph records, electrical transcriptions or taped music, with or without commentary by a local announcer, or other station personnel.

A network program (N) is any program furnished to the station by network (national, regional or special) such as NET, NAEB Radio Tape Network, Eastern Educational Network, Educational Radio Network, etc.

Other Programs (OTHER) are any programs not defined above, including, without limitation, syndicated film, tape or transcribed programs, and feature films.

2. Types of educational programs are defined as follows:

Instructional (I) includes all programs designed to be utilized by any level of educational institution in the regular instructional program of the institution. In-school, in-service for teachers, and college credit courses are examples of instructional programs.

General Educational (GEN) is an educational program for which no formal credit is given.

Performing Arts (A) is a program, live or recorded, in which the performing aspect predominates such as drama or concert, opera or dance.

Public Affairs (PA) includes talks, discussions, speeches, documentaries, editorials, forums, panels, round tables, and similar programs primarily concerning local, national, and international affairs or problems.

Light Entertainment (LE) includes programs consisting of popular music or other light entertainment.

Other (O) includes all programs not falling within the definitions of Instructional, General Education, Performing Arts, Public Affairs or light Entertainment. Such programs as news or sports should be reported as "other."

3. Will the applicant transmit any program which will promote any activity other than education in which the applicant or any party to the application is engaged or financially interested, whether directly or indirectly? Yes ☐ No ☐

If "Yes," submit as Exhibit No. _____ a list of such programs together with comments showing the relationship of the programs to the applicant's interests.

4. Attach as Exhibit No. _____ a description of facilities, staff, and equipment available to the applicant for his development and production of program material. Include here such items as, for example, studio facilities; services subscribed and libraries of program material maintained; cameras, tape recorders, remote equipment etc.; staff personnel used in program production. If applicant already has such information on file, indicate file number and detail changes, if any.

5. Will the proposed station be affiliated with any network(s)?

Yes ☐ No ☐

If "Yes," give the name of the network(s).

NOTE: The NET, NAEB Radio Tape Network, Educational Radio Network, and the Eastern Educational Network are examples of educational networks.

FEDERAL COMMUNICATIONS COMMISSION

Section V - Page 1

ENGINEERING DATA

NAME OF APPLICANT
Trans Video
Communications, Inc.FOR COMMISSION USE ONLY
File No.

1. Purpose of authorization applied for: (Indicate by check mark.)

☐ (a) Construct a new station☒ (b) Modify an existing authorization to change:

- ☒ 1. Transmitter type or modification
☒ 2. Transmitting Antenna type, gain or directivity
☒ 3. Transmitting Antenna height or location
☐ 4. Transmitter control method

- ☒ 5. Transmitter location
☐ 6. Frequency assignment
☐ 7. Operating power
☐ 8. Other (describe below)
☐ 9. Response Station(s)
☐ 10. Low Power Relay Station(s)

File number and call of authorization to be modified:
KNZ-69

Note: In applications for changes in existing authorizations, only the following items pertinent to the proposed changes need to be completed.

2. Facilities requested:

Note: Use a separate column for each transmitter located at the site specified in Item 3 below. Include only transmitters having a common antenna site in this application. A separate application is required for each different transmitter location.

(a) Transmitter Identification No.	T1	T2	T3	T4	T5 (for modification of exist. facilities only)
(b) Channel No. <u>1/</u>	B-1	B-2	B-3	B-4	
(c) Station Purpose <u>2/</u>	-----	-----	-----	-----	
(d) Signal Source (For relay station only) <u>3/</u>	-----	-----	N/A	-----	
(e) Transmitter Make and Model No. <u>4/</u>	-----	-----	Comwave SB010-MRC	-----	
(f) Transmitter Rated Output Power <u>5/</u>	10 watts	10 watts	10 watts	10 watts	
(g) Proposed Transmitter Operating Output Power <u>6/</u>	10 watts	10 watts	10 watts	10 watts	
(h) Transmitting Antenna Make and Model No. <u>7/</u>	-----	Custom Bogner	B16SB array	-----	
(i) Transmitting Antenna Type <u>8/</u>	-----	-----	Dipole array	-----	
(j) Transmitting Antenna Maximum Lobe Gain (DB) <u>9/</u>	-----	-----	13.0 dBi	-----	
(k) Transmitting Antenna Overall height above ground (FT) <u>10/</u>	-----	-----	1412' (430.4m)	-----	
(l) Polarization of Radiated Signal <u>11/</u>	-----	-----	vertical	-----	

1/ Use channel designators shown in Rules for particular frequency band limit proposed, such as A-1, A-2, A-3, etc. (See Rule 74.902)2/ Specify either "Originating" or "Relay."3/ When station is to be used as a "Relay" station, indicate source of signal, i.e., other instructional TV fixed station, educational or commercial TV station, or other class of station, by entering call or file number and location of station to be relayed.4/ Use abbreviation of manufacturer's name with model designation.5/ Specify output power (peak visual) in watts as rated by manufacturer.6/ Specify proposed operating output power (peak visual). Application proposing operating output power greater than 10 watts (peak visual) must be accompanied by special showing required by Section 74.935(b) of the Rules.7/ Use abbreviation of manufacturer's name with model designation.8/ State basic type using general descriptive terms, such as 6-ft. parabola, corner reflector, helix, etc.9/ State maximum power gain (DB) in horizontal plane with respect to isotropic radiator.10/ Specify proposed overall height of antenna above ground level in feet.11/ Specify polarization of radiated signal, such as horizontal, vertical, left or right-hand circular, etc.

(m) Has each one of the above-listed transmitters been type accepted by the FCC for this service?

Yes ☒ No ☐If answer is "No," attach, as Exhibit No. _____, a complete showing of transmitter details, including technical specifications and schematic diagram. If this information is presently on file with the FCC by the manufacturer, omit such information from application and check here ☐.

3. Proposed transmitter location:

(a) City	New York	County	Kings	State	New York (Brooklyn)
Address or other description of location				Geographical coordinates of transmitting antenna(s) to the nearest second:	
Empire State Building				North Latitude	West Longitude
				40° 44' 54"	73° 59' 10"

- (b) Will the proposed transmitting antenna supporting structure be shared with another instructional television fixed station or station of any other classification? **See Engineering Statement.** Yes ☒ No ☐

If answer is "Yes," list the call sign and classification of each such station.

- (c) Attach, as **EXHIBIT Eng.**, a map or maps of appropriate scale and detail (preferably U. S. Geological Survey Topograph Quadrangles) for the proposed area to be served by the transmitter(s) and shown drawn thereon the following:
- (1) Scale of miles.
 - (2) Direction of true north.
 - (3) Outline of principal school district or other area intended to be served by proposed system.
 - (4) Location of proposed transmitting site, accurately plotted.
 - (5) Location of all known radio stations (except amateur), such as AM, FM, TV, instructional TV (fixed, operational fixed, police, fire, aeronautical, etc.), and known commercial or government receiving sites, located within 1000 feet of the proposed site.
 - (6) Location of each receiving, response station, or low power relay station location intended to be served by each transmitter listed in Item 2 above. Each receiving or response station location intended to be served should be identified by an individual symbol, such as R1, R2, etc., for receiving locations, and RT1, RT2, etc., for each location having response transmitters. Low power relay stations can be identified by LPRI, LPR2, etc.

Note: Where the receiving, response stations, or low power relay station sites for the proposed system are so widely separated geographically that to show them on the same or several maps would result in an unwieldy and voluminous exhibit, it will be acceptable to furnish a reduced composite exhibit consisting of a sketch drawn approximately to scale showing the azimuthal and distance relationship between the transmitting and receiving, response station, and relay, if used. In any event, the sites shall be shown plotted on a map as described in Item 3(c) above.

- (d) Attach, as **EXHIBIT Eng.**, a map or sketch, drawn to scale, showing the boundaries of all local and county, public and private school districts in and adjoining the area to be served, and the location or locations of the proposed transmitters. Since it is the purpose of the required maps or sketches only to show the geometric configuration of the proposed ITFS system and the pattern of school districts in which separate ITFS systems may be needed, they should not be cluttered with unnecessary details. Main roads may be shown for the purpose of relating the simple map or sketch with maps showing more detail. Major topographic features which affect the choice of transmitting sites, or would serve to contain potential interference, should be indicated.

- (e) (1) Attach, as **EXHIBIT N/A**, separate vertical plan views of the antenna installation of the transmitting and each receiving low power relay station or response station location proposed, showing the ground elevation of the site above mean sea level, the height above ground of any building or other man-made structure on which the antenna(s) will be mounted, giving separate vertical dimensions for the building or other existing structure which may be used, and the entire height above ground of the tower or mast proposed to be erected support the antenna(s). Indicate thereon the overall height above ground for each antenna. Each sketch shall be prepared on an 8 x 10 1/2 inch sheet. The reference numbers used above, such as T1, T2, R1, R2, RT1, RT2, etc., should be used to identify the various transmitting, receiving, and response station locations. Low power relay stations should be shown as LPRI, LPR2 etc.
- (2) With each vertical plan view for the transmitting antenna(s), associate a separate 8 x 10 1/2 inch sheet containing a polar diagram of the horizontal relative FIELD pattern and indicate thereon the direction of true north with respect to the proposed antenna orientation. Also label the polar diagram at the appropriate point with the maximum horizontal radiation lobe power gain expressed in db with respect to an isotropic radiator.

NOTE: In the event it is proposed to intentionally radiate power in directions other than toward the above-described receiving locations, a complete statement shall be furnished as to the purpose of such additional radiation.

4. Remote Control operation:

Will any transmitter listed above be operated by remote control? Yes ☐ No ☒

If the answer is "Yes," and this application is for authority to construct a new station, or to employ remote control for the first time for an authorized station, attach as **EXHIBIT** identifying applicable transmitters and furnish a full description as to the manner of compliance with Section 74.933 of the Rules.

Unattended operation:

Will any transmitter listed above be operated as an unattended automatic relay? Yes ☒ No ☐

If the answer is "Yes," and this application is for authority to construct a new automatic relay station, or to make changes in an authorized automatic relay station which will for the first time be operated unattended, attach as **EXHIBIT Eng.** identifying applicable transmitters and furnish a full description as to the manner of compliance with Section 74.934 of the Rules.

The Federal Aviation Administration (FAA), pursuant to Part 77 of the Federal Aviation Regulations, requires notification of certain construction or alteration of antenna structures. Antenna structures which do not exceed an overall height of 20 feet above ground, and antenna structures increasing by 20 feet or less the height of existing man-made structures, other than existing antenna structures, do not require notification. Accordingly, applicant's determination as to whether filing of Form FAA-7460-1 with the FAA is necessary for the proposed construction of either transmitting or receiving antenna structures shall be noted by checking the appropriate statement below:

☒ Notification to the FAA is not required for the construction proposed herein.

☐ Notification to the FAA for the construction proposed herein was made on Form FAA-7460-1 on

7. Environmental statement, See Part 1, Subpart 1 of the rules.

Would a Commission grant of this application be a major action as defined by Section 1.1305 of the Commission's rules?

☐ YES If yes, submit as EXHIBIT
Section 1.1311 of the rules.

the required statement in accordance with

☒ NO If no, explain briefly.

Application is believed to be categorically excluded
from environmental processing.

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

Date April 28, 1987

Signature

William C. Karg
(check appropriate box below)

☐ Technical Director

☒ Consulting Engineer

☒ Registered Professional Engineer

☐ Chief Operator

REGISTERED

APR 29 1987

FCC-NEW YORK

Exhibit I-1

Applicant TVC is the ITFS operating arm of the Roman Catholic Diocese of Brooklyn, which is responsible for the administration of the schools of the Diocese, all of which are accredited. Its present service, which is local, requires the use of both the B and F Group channels. Relocating its transmitter to the Empire State Building, as proposed by this application, will enable the Diocese to provide better service using the B Channels only. The Diocese, through TVC, will continue to provide more than 41 average hours of formal educational programming per channel per week. (See Exhibit IV-1.)

JULES COHEN & ASSOCIATES, P.C.
CONSULTING ELECTRONICS ENGINEERS
WASHINGTON, D.C. 20036

ENGINEERING EXHIBIT
APPLICATION FOR MODIFICATION OF LICENSE
ITFS STATION KNZ-69
TRANS VIDEO COMMUNICATIONS, INC.
BROOKLYN, NEW YORK
CHANNEL GROUP B

April 28, 1987

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ENGINEERING EXHIBIT
APPLICATION FOR MODIFICATION OF LICENSE
ITFS STATION KNZ-69
TRANS VIDEO COMMUNICATIONS, INC.
BROOKLYN, NEW YORK
CHANNEL GROUP B

Table of Contents

	Engineering Statement
Figure 1	Proposed Transmitting Location and Area to be Served
Figure 2	Proposed Transmitting Site and Vicinity
Figure 3	Proposed Transmitting Antenna and Supporting Structure
Figure 4	Typical Receiving Antenna Installation
Figure 5	Antenna Radiation Pattern
Figure 6	ITFS Applications and Authorizations Considered for Interference
Figure 7	Interference Studies
	Affidavit of William C. King, Jr.

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ENGINEERING EXHIBIT
APPLICATION FOR MODIFICATION OF LICENSE
ITFS STATION KNZ-69
TRANS VIDEO COMMUNICATIONS, INC.
BROOKLYN, NEW YORK
CHANNEL GROUP B

Engineering Statement

This engineering exhibit was prepared on behalf of Trans Video Communications, Inc. (hereinafter "TVC") to support an application for modification of license for ITFS station KNZ-69. TVC seeks authority to relocate its existing station KNZ-69, presently operating on all four B group frequencies (B-1 through B-4), from its present site at Bishop Ford High School in Brooklyn, New York, to the Empire State Building in lower Manhattan, New York. The antenna placement proposed herein would not require notification to the Federal Aviation Administration and would be categorically excluded from environmental processing. This application is mutually exclusive with that of Health, Research and Educational Trust, File No. BPIF-861231DA, for channels B-1, B-3 and B-4 at the same site, and with the application of Union Township Schools, File No. BMLIF-850729DA, for channel C-1 at the same site.

Purpose

The purpose of the instant application is two-fold: to expand the area presently served by TVC to include portions of three Roman Catholic Dioceses in New Jersey, and to improve spectrum utilization. These objectives would be accomplished by relocating TVC's station KNZ-69 from its present location in Brooklyn to the Empire State Building, and by relinquishing TVC's operations on ITFS Group F. Relocation to the Empire State Building

Engineering Statement
Brooklyn, New York

Page 2

would enable KNZ-69 to reach portions of New Jersey and portions of Brooklyn and Queens not served by its present operation, because of the lower antenna height of KNZ-69's existing antenna. TVC believes that most receiving locations now dependent for reception upon TVC's transmitters, KNZ-70 and KVS-31 operating on Group F, would be able to receive KNZ-69 if operating from the Empire State Building as proposed herein. Therefore, TVC would relinquish its Group F operations pursuant to an agreement with the MMDS selectee for Group F at New York, thereby improving spectrum efficiency by making available the four Group F channels.

Proposed ITFS Service Area

TVC plans to continue to provide programming to schools of the Roman Catholic Diocese of Brooklyn (all of which are situated within the Boroughs of Brooklyn and Queens in New York City), which presently receive ITFS signals from KNZ-69, KZE-20, KNZ-70 and KVS-31, and to serve the schools of portions of three dioceses in New Jersey.

Proposed Transmitting and Receiving Locations

Figure 1 outlines the Diocese of Brooklyn, and portions of the Dioceses of Newark, Paterson, and Metuchen. More than 400 schools are intended to be served within the entire coverage area. Because of the large number of proposed receiving locations, no attempt has been made to plot them all on a map. Instead, all receiving locations are tabulated in Section VI of FCC Form 330P.

Figure 2 shows the proposed Empire State Building transmitter site and vicinity. Geographic coordinates of the site are:

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Engineering Statement
Brooklyn, New York

Page 3

40° 44' 54" North Latitude
73° 59' 10" West Longitude.

Figure 3 is an elevation sketch of the Empire State Building and television mast on which TVC proposes to mount its ITFS antenna. The antenna is to be mounted at the 430.4-meter (1412-foot) level on the television mast.

Figure 4 is a sketch of a typical receiving antenna installation. Approximately one-half of the receiving locations have antenna systems in place. New installations will be considered with regard to the applicability of Part 17 of FCC Rules. TVC plans to mount new receiving antennas so as not to extend more than 6.1 meters (20 feet) above the highest point of the roof of the associated school building. At some locations where obstructions exist, the receiving antenna height will not exceed the height of nearby trees, flag poles, or buildings. Where appropriate, a Notice of Proposed Construction or Alteration will be submitted to the Federal Aviation Administration on FAA Form 7460-1, and the Commission will be advised accordingly.

Proposed Equipment

For each channel, TVC plans to employ a Comwave SB010-MRC transmitter operating as an unattended automatic relay with an output power of ten watts. The transmitters will feed a pair of Bogner vertically polarized antennas mounted on opposite sides of the square tower section. The antenna will provide a maximum gain of 13.0 dB (with respect to an isotropic radiator), and will employ an electrical beam tilt of -2.0 degrees. Bogner has provided a calculated horizontal plane radiation pattern for the vertically polarized antenna system which is included herein as Figure 5. The antenna will be fed

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Engineering Statement
Brooklyn, New York

Page 4

through Andrew type EW-20 (or the equivalent) waveguide. The proposed operation would have a maximum effective isotropic radiated power (EIRP) of 51.5 dBm. A question has been raised with respect to the information furnished by Bogner, which is presently under consideration. Should an amendment with respect to that information be required, it will be promptly furnished.

Operation of the unattended relay transmitters will be conducted in accordance with the provisions of Section 74.934 of the Rules, and in a manner consistent with the type acceptance disclosure made by the transmitter manufacturer to the Commission. Adequate safeguards will be provided at the site to prevent unauthorized operation of the transmitting equipment, and one or more individuals will be available to provide access to the equipment should such access be required.

Interference Analysis

As required in Section 74.903 of the Rules, interference studies have been performed for all authorized or previously proposed cochannel or adjacent channel ITFS stations within 50 miles (80.5 kilometers) of the proposed TVC transmitter site. A frequency search revealed a number of authorizations and applications proposing operation on channels A1-A4, B1-B4, and C1, and situated within 50 miles of the Empire State Building. A list of these facilities is attached hereto as Figure 6.

Cochannel Considerations

Section 74.903(a)(1) of the FCC Rules requires that cochannel stations be afforded a protection ratio of 45 decibels (dB), desired-to-

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Engineering Statement
Brooklyn, New York

Page 5

undesired signal level. There are six authorizations or applications listed in Figure 6 which specify the use of channel Group B: KZE-20, WHR-691, KHC-94, KNZ-68, WOW-99, and BPIF-861231DA. Stations KZE-20 and WHR-691 are licensed to the applicant and, as addressed earlier herein, will not be protected. It is believed that receiving locations dependent upon KZE-20 and WHR-691 will be able to obtain direct reception from KNZ-69 operating as proposed herein.

KHC-94, BMLIF-870115DA, Plainview, New York

KHC-94 operates with 5 watts transmitter output power in conjunction with a vertically polarized, cardioid directional antenna pattern. Major lobe EIRP is estimated to be 49.1 dBm. Figure 7, Sheet 1 is a tabulation of desired-to-undesired signal ratios computed for each of nine licensed receiving locations and two receiving locations as proposed in BMLIF-870115DA. Four locations, as footnoted, require the use of a four-foot parabolic receiving antenna to satisfy receiving criteria instead of the FCC two-foot reference antenna, assuming an unobstructed path. The tabulation demonstrates that, at every location, the ratio of desired-to-undesired signal will exceed 45 dB. Hence, the Commission's rules are satisfied with respect to KHC-94.

KNZ-68, Central Islip, New York

KNZ-68 operates with ten watts transmitter output power in conjunction with a horizontally polarized, omnidirectional antenna pattern. EIRP is estimated to be 54.3 dBm. Figure 7, Sheets 2 & 3, contain a tabulation of desired-to-undesired signal ratios computed for each of the thirty licensed receiving locations. As in the case of KHC-94, it will be necessary

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Engineering Statement
Brooklyn, New York

Page 6

for two of the receive locations to employ six-foot parabolic receiving antennas in order to satisfy the cochannel protection ratio. At every location, the ratio of desired-to-undesired signals exceeds 45 dB. Hence, the Commission's rules are satisfied with respect to KNZ-68.

WOW-99, Mercerville, New Jersey

WOW-99 is licensed to operate with a transmitter output power of ten watts in conjunction with both a horizontally polarized directional antenna and a vertically polarized parabolic antenna. After contacting the licensee, it is understood that only one location, a branch of the Mercer Community College, is now being used to receive WOW-99. This location is believed to be receiving a vertically polarized signal. Figure 7, Sheet 4, is an interference analysis for this sole location. If a six-foot parabolic receiving antenna is employed at this site, the Commission's requirement of a 45 dB desired-to-undesired signal ratio would be met.

BPIF-861231DA, New York, New York

Health Research and Educational Trust ("HRET") proposes to operate on channels B1, B3, and B4 at the Empire State Building, with vertical polarization. Since the instant application would be colocated and copolarized with the proposed HRET operation, the two proposals are mutually exclusive.

Adjacent Channel Considerations

Section 74.903(a)(2) of the FCC Rules requires that adjacent channel stations constructed prior to May 26, 1983, be afforded an additional protection of 10 dB over stations constructed or applications filed after that

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WASHINGTON, D.C. 20036

Engineering Statement
Brooklyn, New York

Page 7

date. The stations, listed in Figure 6, eligible for 10 dB additional adjacent channel protection are: KHD-21, KRS-84, KNZ-67, KRS-81, and WGM-95. The less stringent zero dB protection ratio required by the rules will be afforded to all other adjacent channel facilities listed in Figure 6. It will be demonstrated herein that protection to these stations is provided (even on a worst-case basis).

KHD-21, Franklin Square, New York

KHD-21 utilizes a ten-watt transmitter in conjunction with a horizontally polarized antenna with a gain of 12.2 dBi to operate on channels A1-A3. EIRP is estimated to be 54.9 dBm. There are twelve receiving locations on file with the Commission. The worst case for potential interference to KHD-21 would occur on a line drawn from the undesired TVC transmitter through the desired transmitter site, extended to a hypothetical receiver at the outer service limit, assuming horizontal polarization. The longest receiving path (assumed service limit) served by the KHD-21 antenna is 3.3 miles. Distance from the undesired Empire State Building transmitter to the desired KHD-21 transmitter is 16.8 miles. Figure 7, Sheet 5, shows an analysis of this worst-case assumption. The desired-to-undesired ratio for this case is 39.2 dB (10 dB required). Hence, the Commission's rules are satisfied with respect to KHD-21.

KRS-84, BMLIF-861010DE, Haverstraw, New York

KRS-84 utilizes a ten-watt transmitter in conjunction with a horizontally polarized antenna with a gain of 10.0 dBi to operate on channel Group A. The estimated EIRP is 48.6 dBm. Pending application, BMLIF-861015DE filed by KRS-84, clarifies the locations of its fourteen receive sites.

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WASHINGTON, D.C. 20036

Engineering Statement
Brooklyn, New York

Page 8

The worst case for potential interference to KRS-84 would occur on a line drawn from the undesired TVC transmitter through the KRS-84 transmitter site, extended to a hypothetical receiver at the outer service limit, assuming horizontal polarization. The longest receiving path (assumed service limit) served by the KRS-84 antenna is 11.4 miles. Distance from the undesired TVC transmitter to the desired KRS-84 transmitter is 31.6 miles. Figure 7, Sheet 6, shows an analysis of this worst-case assumption. The desired-to-undesired ratio for this case is 31.6 dB (10 db required). Hence, the Commission's rules are satisfied with respect to KRS-84.

KNZ-67, Syosset, New York

KNZ-67 utilizes a ten-watt transmitter in conjunction with two oppositely polarized directional antennas, each having maximum gain of 17.0 dBi operating on channel Group A. Power is split equally between the horizontally polarized antenna oriented at 290 degrees and the vertically polarized antenna oriented at 60 degrees. Of the fourteen receiving sites, five receive a vertically polarized signal. The longest path (assumed service limit) to one of the vertically polarized receiving locations is 9.1 miles. Distance from the undesired TVC transmitter to the desired KNZ-67 transmitter is 26.9 miles. Figure 7, Sheet 7, shows an analysis of the worst-case assumption as done in previous cases. The desired-to-undesired ratio for this case is 13.2 dB (10 dB required). No prospect of interference exists with respect to the remaining cross-polarized receiving locations. Hence, the Commission's rules are satisfied with respect to KNZ-67.

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WASHINGTON, D.C. 20036

Engineering Statement
Brooklyn, New York

Page 9

KRS-81, New York, New York

KRS-81 is believed to be authorized to employ ten-watt transmitters in conjunction with a single horizontally polarized, antenna operating on channel Group A. The KRS-81 antenna is mounted on the side of the Empire State Building and is believed to be essentially omnidirectional. Since KRS-81's operation would be colocated and cross polarized with the proposed TVC operation, a two-foot reference antenna would provide at every KRS-81 receiving location a 20-dB discrimination against undesired Group B transmissions and the Commission's requirements for a 10 dB protection ratio would be satisfied.

BPIF-840206DV, Trenton, New Jersey

The National Conference on Citizenship has proposed a ten-watt transmitter in conjunction with two oppositely polarized, back-to-back Bogner type B16SA antennas, each having maximum gain of 17.2 dBi, to operate on channel Group C. Maximum EIRP will be approximately 53.2 dBm. This application specifies no receiving locations, stating instead: "Various Receive Locations Throughout the Trenton, New Jersey Metropolitan Area." In the absence of receiving locations, a 15-mile service area will be assumed for purposes of this analysis. The worst case for potential interference to BPIF-840206DV would occur on a line drawn from the undesired TVC transmitter through the desired Trenton transmitter site, extended to a hypothetical receiver at the 15-mile service limit, assuming vertical polarization. Distance from the undesired TVC transmitter to the desired Trenton transmitter is 48.9 miles. Figure 7, Sheet 8, shows an analysis of this worst-case assumption. The desired-to-undesired ratio would be 14.3 dB (0 dB required). Hence, the Commission's rules are satisfied.

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WASHINGTON, D.C. 20036

Engineering Statement
Brooklyn, New York

Page 10

WGM-95 (Licensed Operation), Union, New Jersey

WGM-95 utilizes a ten-watt transmitter in conjunction with a horizontally polarized antenna with a gain of 10.0 to operate on channel C1. The estimated EIRP is 49.4 dBm. In its application filed with the Commission, WGM-95 stated the use of four receive locations and 19 future receive locations. The longest receiving path (assumed service limit) to any of these locations served by the WGM-95 antenna is 2.5 miles. Distance from the undesired TVC transmitter to the desired WGM-95 transmitter is 15.9 miles. Figure 7, Sheet 9, shows an analysis of this worst-case assumption based upon WGM-95's licensed operation. The desired-to-undesired ratio for this case is 35.2 dB (10 dB required). Hence, the Commission's rules are satisfied with respect to WGM-95's licensed operation.

WGM-95, BMLIF-850729DA, Union, New Jersey

The licensee of WGM-95 also has on file an application (BMLIF-850729DA) to relocate its transmitter to the Empire State Building. WGM-95 proposes to use a ten-watt transmitter in conjunction with two oppositely polarized, back-to-back cardioid directional antennas to operate on channel Group C. The WGM-95 application estimates EIRP to be 49.5 dBm. Protection from predicted interference can not be assured to the east, where copolarized signals would exist at a lower EIRP than proposed by TVC, making it difficult to meet the zero dB desired-to-undesired ratio requirement. Hence, this proposal is mutually exclusive with the WGM-95 application.

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WASHINGTON, D.C. 20036

Engineering Statement
Brooklyn, New York

Page 11

BPIF-820507NR, New York, New York

Educational Broadcasting Corporation (BPIF-820507NR) proposes to operate on channel Group C at the Empire State Building, with horizontal polarization. Since this application would be colocated and cross polarized with the proposed TVC operation, the two-foot reference antenna would provide at every receiving location a 20-dB discrimination against undesired Group B transmissions and the Commission's 0-dB requirement would be satisfied.

Environmental Considerations

The Empire State Building and television mast have been employed for many years as the supporting structure for numerous FM, TV and microwave antennas. TVC's proposed antenna would be mounted on the television mast high above any area accessible to the public. The proposal has been examined pursuant to the procedures outlined in OST Bulletin No. 65, October 1985, and found not to cause exposure exceeding the radio frequency protection guides set forth therein. Hence, the proposal is consistent with Note 1, following Section 1.1306(b)(3) of the Rules, and is believed to be categorically excluded from environmental processing.

Conclusions

The foregoing exhibit demonstrates that the instant application would afford protection in accordance with FCC rules to all authorized and proposed ITFS station within 50 miles except for mutually exclusive applications BPIF-861231DA and BMLIF-850729DA. As a practical matter, however, coordination among all existing and proposed licensees (particularly

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Engineering Statement
Brooklyn, New York

Page 12

those seeking operation at Empire State Building) is essential for the mutual benefit of all ITFS and MMDS operations. TVC will cooperate with the FCC and others in resolving any unforeseen conflicts or potential interference involving its proposal.

TVC has proposed an antenna mounted on the Empire State Building television mast, within the space formerly occupied by channels 7 and 11 (now vacant). The proposal is believed to be feasible, but must be considered subject to results of a structural analysis of the tower, taking into account the needs of other potential users. Since the interference studies assume line-of-sight propagation to all potential receiving locations, the analysis will be unaffected by minor changes in antenna position on the Empire State Building, provided EIRP and polarization remain unchanged.

William C. King, Jr.

William C. King, Jr., P.E.

April 28, 1987

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ENGINEERING EXHIBIT
APPLICATION FOR MODIFICATION OF LICENSE
ITFS STATION KNZ-69
TRANS VIDEO COMMUNICATIONS, INC.
BROOKLYN, NEW YORK
CHANNEL GROUP B

Affidavit

WASHINGTON)
DISTRICT OF COLUMBIA)

ss:

William C. King, Jr., being first duly sworn, says that he is an officer of the firm of Jules Cohen & Associates, P.C., consulting electronics engineers with offices in Washington, DC; that he is a professional engineer registered in the District of Columbia; that his qualifications as an expert in radio engineering are a matter of record with the Federal Communications Commission; that the foregoing exhibit was prepared by him and under his direction; and that the statements contained therein are true of his own personal knowledge except those stated to be on information and belief and, as to those statements, he verily believes them to be true and correct.

William C. King, Jr.

William C. King, Jr., P.E.

Subscribed and sworn to before me this 28th day of April, 1987.

Anne Mazon

Anne Mazon
Notary Public, DC

RECEIVED

My commission expires
October 31, 1991

(SEAL)

FEB 12 2003

FCC-GRS-1-10000

ATTACHMENT D

10/27/88

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In re Application of)
)
TRANS VIDEO COMMUNICATIONS,)
INC.) File No. BMLIF-870429DF
)
For authority to modify the)
license of its ITFS station)
KNZ-69 in the New York,)
New York MSA)

To: (1) Domestic Facilities Division
Common Carrier Division

(2) Video Services Division
Mass Media Bureau

PETITION FOR LEAVE TO AMEND
AND REQUEST FOR PARTIAL GRANT

Trans Video Communications, Inc. (TVC), by its attorneys, requests (1) leave to amend its pending application (BMLIF-870429DF) to modify the license of ITFS station KNZ-69, and (2) a partial grant of the application thus amended. The purpose of these requests is to break the Empire State Building (ESB) ITFS and MMDS logjam, and permit the commencement of ITFS service on the B Group Channels and of MMDS service on the F Group Channels. TVC's application is mutually exclusive with that of the Health Research and Educational Trust of New Jersey (HRET). The proposal made here does not resolve the mutual exclusivity issue, but does limit its effect.

1. The Amendment. The TVC amendment changes the proposed TVC antenna to a cross-polarized (vertical to the east and horizontal to the west) dual cardioid system; reduces effective isotropic radiated power (EIRP) to 49.6 dBm; and relocates the TVC antennas lower, on opposite faces of the ESB mooring mast. The purpose of these changes is to eliminate the potential for interference to the A Group (Archdiocese of New York) and C Group (Union Township) channels. TVC has already committed its willingness to make these changes in a letter from undersigned counsel to the Commission dated March 14, 1988. (That letter was in response to the December 23, 1987 letter effort by Messrs. James R. Keegan and Roy J. Stewart to resolve the various conflicts impeding the initiation of full ITFS and MMDS service from the ESB.) TVC's amendment formalizes and confirms, but does not change, its prior commitment.

2. The Request for Partial Grant. TVC's omnidirectional B-1, B-3, and B-4 proposal is mutually exclusive with HRET's proposed directional (to the west) use of those channels. There is no application in conflict with TVC's B-2 proposal. TVC asks that the Commission grant its B-2 request, and, in addition, grant the eastward facing portion of its amended application, leaving the westward facing portion of its proposal, which is the portion in conflict with HRET, to be resolved at a later date.¹

¹ TVC has previously urged the Commission to address and resolve that mutual exclusivity conflict. By making a partial grant request, TVC does not mean to imply in any way that it is not still urging the Commission promptly to decide the westward facing conflict.

The various proposed and existing ESB ITFS and MMDS facilities are interlinked in complex ways, creating a difficult situation for the Commission, the parties, and the public interest in full service, which has not lent itself to conventional resolution approaches. TVC is here attempting to be constructive by offering a partial solution which will permit some additional service to be initiated. In doing this, TVC has attempted to be responsive to the call by Messrs. Keegan and Stewart for the development of concrete proposals for the resolution of issues presented.

There are a number of points which TVC wishes to bring to the Commission's attention.

First, TVC assumes that a partial grant of the eastward facing portion of its applications will not in any way bias, either for it or against it, the resolution of the mutually exclusive, westward portion of its application. If there is any doubt on this point in the Commission's mind, TVC asks that the Commission treat this request as though it had not been made.

Second, under this proposal, were the HRET application ultimately to be granted, HRET would be required to operate (1) with vertical polarization, rather than the horizontal polarization it has proposed, and (2) if service is to be maximized, to operate in the coordinate (with TVC) manner described in the attached Engineering Statement. TVC believes that these minimal and essentially cost free obligations for HRET would not be burdensome.

Third, despite (1) the shielding of the substantial ESB mooring mast, (2) the use of matched antennas, (3) cross-polarization, (4) offset operation, (5) transmitter colocation, (6) the use in a

few sensitive receiving locations of 4-foot parabolic reflector receiving antennas, (7) precise receiving antenna positioning in ~~those locations,~~ and ~~(8) the option of phase-locking the transmitters~~ to a common master clock oscillator, all of which are detailed in the attached Engineering Statement, there is still the possibility that a few potential receive sites along the north-south axis which divides the east and west facing antenna coverage areas could experience interference. This is inescapable, although the interference potential is reduced to the absolute minimum by the procedures outlined above, and it may well be that no receive location ultimately actually used will in fact receive interference. Certainly, even were the Commission ultimately to grant the HRET westward directional proposal, the Commission would not prohibit all eastward operation by TVC in order to protect against the remote possibility of interference at a handful of potential receive locations.

Finally, TVC is furnishing its proposal in an effort to resolve conflicts. It believes that its amendment is minor, or, even if major, is appropriately considered under Section 21.31(e)(2) of the rules (even a major amendment will not result in an application's being treated as newly filed if it resolves frequency conflicts and does not create new or increased frequency conflicts). Were the Commission to disagree and also be unwilling to waive its cut-off rules (which is requested if necessary), TVC's effort could, of course, result in its being procedurally adversely affected. Accordingly, if the Commission believes that

it cannot either treat TVC's amendment as minor or subject to Section 21.31(e)(2), or waive its cut-off rules, TVC asks that its amendment be treated as though it had not been filed.

It is TVC's earnest hope that HRET will not oppose this modest proposal, which will permit the prompt initiation of new ITFS service from the ESB.

Respectfully submitted,

TRANS VIDEO COMMUNICATIONS,
INC.

By:



Victor E. Ferrall, Jr.

CROWELL & MORING
1001 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
(202) 624-2500

Its Attorneys

October 27, 1988

JULES COHEN & ASSOCIATES, P.C.
CONSULTING ELECTRONICS ENGINEERS
WASHINGTON, D.C. 20036

ENGINEERING STATEMENT
SUPPLEMENT TO AMENDMENT TO
APPLICATION FOR MODIFICATION OF LICENSE
ITFS STATION KNZ-69
TRANS VIDEO COMMUNICATIONS, INC.
BROOKLYN, NEW YORK
CHANNEL GROUP B

This engineering statement has been prepared on behalf of Trans Video Communications, Inc. (hereinafter, TVC). TVC has an application on file with the Commission, File Number BMLIF-870429DF, requesting authority to relocate the transmitters of its ITFS station KNZ-69, Brooklyn, New York. KNZ-69 is licensed and operating on ITFS Channel Group B from its existing transmitter site in Brooklyn. The pending application of TVC seeks authority to relocate the KNZ-69 transmitters to the Empire State Building, employing vertical polarization with an omnidirectional antenna. The pending application of TVC is mutually exclusive with a proposal, File Number BPIF-861231DA, by the Health Research and Educational Trust (hereinafter, HRET) for use of channels B-1, B-3, and B-4 from the Empire State Building, employing a west-facing directional antenna, vertically polarized. This firm has prepared an engineering exhibit in support of an amendment to the TVC proposal which changes the proposed transmitting antenna from an omnidirectional vertically polarized configuration, to back-to-back cardioid pattern antennas. The east-facing antenna would be polarized vertically and the west-facing antenna would be polarized horizontally.

At the request of TVC, we have studied the prospect for shared use by TVC and HRET of the three channels which are in conflict; that is, channels B-1, B-3, and B-4. It is our conclusion that, employing the antenna

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WASHINGTON, D.C. 20036

Engineering Statement
Brooklyn, New York

Page 2

configuration set forth in the engineering exhibit with minor modifications as set forth below, shared-channel operation would be feasible.

Figure 1, attached, is a block diagram of a system whereby the TVC and HRET transmitters could operate simultaneously from a shared antenna system. Each antenna would be fed by a four-way transmitter combiner, as is the usual practice for ITFS stations. Channel B-2 (and any other unshared channels) would be fed from the TVC transmitter, through a two-way splitter, and into both combiners; thus, into both antennas. On the shared channels, the TVC transmitters would be fed into the input ports of the combiner serving the east-facing antenna, while the HRET transmitters could be fed into the combiner ports of the west-facing antenna.

Ten-kilohertz frequency offset operation would be required for those pairs of transmitters operating on the same channel. This would permit the use of a 28 dB desired-to-undesired (D/U) cochannel signal ratio. The use of the 28 dB D/U ratio for offset operation has been accepted by the FCC as the allocation standard in the commercial television service. Although offset operation has not heretofore been commonly employed in the ITFS service, the television signal which is transmitted by ITFS stations is identical to a broadcast TV signal, except for carrier frequency. Once it has passed through the frequency downconverter, an ITFS signal is demodulated and displayed by receiving equipment which is identical to that employed in the broadcast TV service, so the receiver response to offset cochannel desired and interfering signals is the same as for broadcast television. In fact, the 45 dB D/U ratio normally employed as an allocation standard in the ITFS for nonoffset cochannel stations is identical with the D/U ratio employed in broadcast TV for nonoffset operation. In the case at hand, the TVC and HRET transmitters would be colocated and thus subject to similar environmental conditions, which should result in greater stability of the frequency offset, thus better offset

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Engineering Statement
Brooklyn, New York

Page 4

represent areas where the oppositely polarized, undesired signal will be effectively blocked by the Empire State Building. The smaller sectors to the northeast and southwest represent areas where both signals can be expected to be present. The number of receiver sites for TVC and HRET within each sector is shown on Figure 2. As is indicated in Figure 2, of the 93^{1/} receiver sites proposed by HRET, 66 sites lie in the western sector, a total of 21 lie in the northeast and southwest sectors, and 6 lie in the eastern sector. TVC has 202 existing sites, all of which lie in the eastern sector, and 229 proposed sites, all of which lie in the western sector. While TVC will not be able to provide service on the shared channels to its proposed sites within the western sector, they will receive service on channel B-2. The 21 sites proposed by HRET within the northeastern and southwestern sectors can be expected to receive a satisfactory signal from the desired transmitter, but 4-foot antennas are likely to be required to obtain at least a 28 dB D/U ratio.

In any microwave point-to-multipoint service such as ITFS, for which radio propagation is essentially a line-of-sight phenomenon, there is no absolute guarantee that a particular receiving location will receive satisfactory service. In any large metropolitan area, numerous tall buildings and other man-made obstructions often act to block the signal paths.

In summary, it is our opinion that through the use of colocated transmitters with offset carriers, employing matching cross-polarized antennas on opposite sides of the building, by using 4-foot receiving antennas where

^{1/} The HRET receiver sites are numbered R1 through R97, but four numbers (3, 13, 27, and 89) are skipped in the tabulation.

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Engineering Statement
Brooklyn, New York

Page 3

performance than is obtained in commercial television with noncolocated transmitters. Furthermore, the fact that the transmitters will be colocated would permit them to be phase-locked to a common master clock oscillator. Such a procedure could provide even greater frequency stability, should it be desired.

At most receiver locations, D/U ratios substantially better than 28 dB will be obtained, due to the fact that the undesired signal will be totally blocked by the intervening Empire State Building. Even at those few locations where the desired and undesired signals would be present in about equal strengths, the use of 4-foot parabolic reflector receiving antennas would provide sufficient cross-polarization discrimination to meet the 28 dB D/U ratio standard. The use of colocated, matching, cross-polarized antennas assures that, to the northeast and southwest where both signals will be present, the vertical plane antenna radiation patterns will be matched, thus minimizing signal strength disparities. Most of the proposed HRET receiving locations are west of the proposed transmitter site, and most of TVC's existing receiver locations are to the east; thus the percentage of sites which will require 4-foot antennas is expected to be small.

Experience in ITFS has shown that small adjustments in the receiving antenna position can produce dramatic differences in received signal strength. The practical implication of this phenomenon is that the receiving antenna can usually be positioned so as to favor reception of the desired signal, while rejecting the undesired signal. At most locations, reception superior to that anticipated by the predicted D/U ratio can be obtained by adjustment of the receiving antenna.

Figure 2 is a diagram which divides the area around the Empire State Building into four sectors. The larger sectors to the east and west

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Engineering Statement
Brooklyn, New York

Page 5

required, and by careful placement of the receiving antennas, shared-channel operation by HRET and TVC is a viable option.

William C. King, Jr.

William C. King, Jr., P.E.

Charles N. Miller

Charles N. Miller, P.E.

Subscribed and sworn to before me this 12th day of October, 1988.

Anne Mazon

Anne Mazon
Notary Public, DC

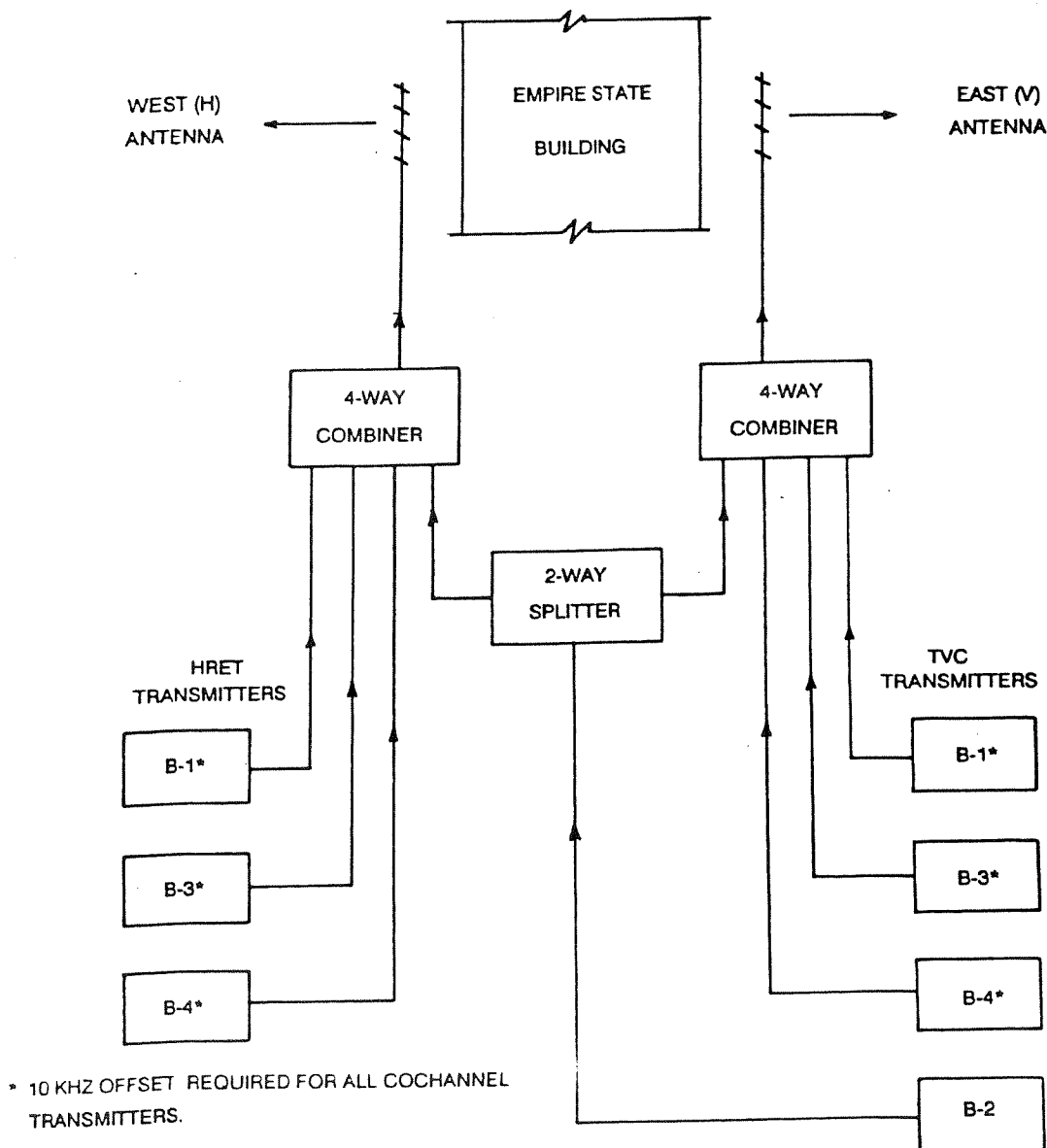
My commission expires
October 31, 1991

(SEAL)

Figure 1

SEPTEMBER 1988

Note: This diagram represents a worst-case situation which assumes shared use of all MX channels by HRET and TVC. Any lesser number of HRET channels could be accommodated by use of additional 2-way splitters.



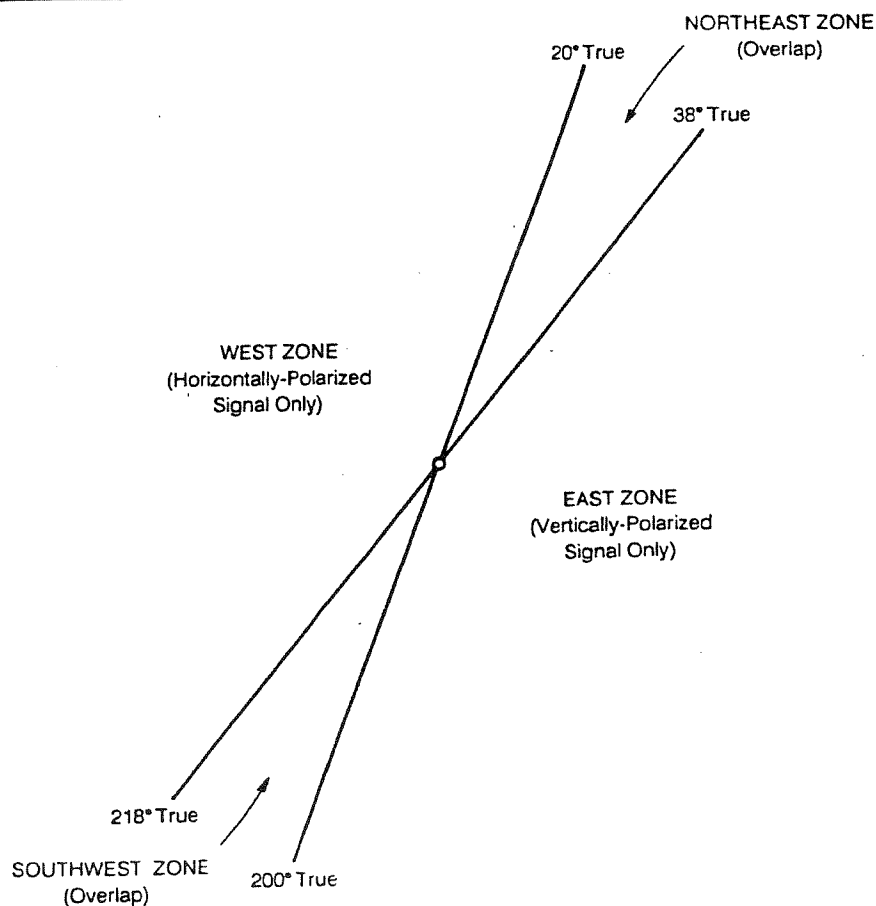
BLOCK DIAGRAM OF POSSIBLE SHARED ANTENNA OPERATION

TRANS VIDEO COMMUNICATIONS, INC.
ITFS STATION KNZ-69
BROOKLYN, NEW YORK

Jules Cohen & Associates, P.C. Consulting Electronics Engineers

Figure 2

TABULATION OF RECEIVER LOCATIONS WITHIN EACH SIGNAL ZONE					
Zone	NE	E	SW	W	Total
HRET (Proposed)	15	6	6	66	93
TVC (Existing)	0	202	0	0	202
TVC (Proposed)	0	0	0	229	229



SIGNAL ZONE DIAGRAM

TRANS VIDEO COMMUNICATIONS, INC.
ITFS STATION KNZ-69
BROOKLYN, NEW YORK

Jules Cohen & Associates, P.C. Consulting Electronics Engineers

SEPTEMBER 1988

CERTIFICATE OF SERVICE

I hereby certify that I have caused a copy of the foregoing Petition for Leave to Amend and Request for Partial Grant to be mailed, this 27th day of October, 1988, by first class mail, postage prepaid, to the following:

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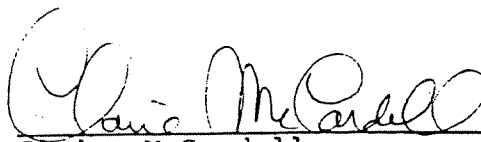
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ATTACHMENT E

CHANNEL COORDINATION AND
EXCESS CHANNEL CAPACITY LEASE AGREEMENT

BETWEEN

TRANS VIDEO COMMUNICATIONS, INC.

AND

CAI WIRELESS SYSTEMS, INC.

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TABLE OF CONTENTS

	<u>TOPIC</u>	<u>PAGE</u>
	RECITALS	1
ARTICLE 1	TERM	3
ARTICLE 2	RIGHT OF FIRST REFUSAL	3
ARTICLE 3	LEASED CHANNELS	6
ARTICLE 4	SIGNAL COMPRESSION	7
ARTICLE 5	TRANSMISSION AND RECEIVE FACILITIES	9
ARTICLE 6	NEW TRANSMISSION POINT	14
ARTICLE 7	LEASED EQUIPMENT	17
ARTICLE 8	REGULATORY COOPERATION	19
ARTICLE 9	PERSONNEL	19
ARTICLE 10	COMPENSATION FOR LEASE OF EXCESS CAPACITY	20
ARTICLE 11	RIGHT TO AUDIT RECORDS	24
ARTICLE 12	SECURITY DEPOSIT	25
ARTICLE 13	CONTROL OVER PROGRAMMING	26
ARTICLE 14	PROGRAM REVIEW PROCEDURES	28
ARTICLE 15	PROMOTION, NAMES & SYMBOLS	29
ARTICLE 16	TRANSFER AND TERMINATION	29
ARTICLE 17	BINDING ARBITRATION	32
ARTICLE 18	ASSIGNMENT AND SUBLEASING	33
ARTICLE 19	INDEMNIFICATION AND HOLD HARMLESS	34
ARTICLE 20	FORCE MAJEURE	34
ARTICLE 21	SPECIFIC PERFORMANCE	35
ARTICLE 22	INSURANCE	36
ARTICLE 23	BINDING EFFECT	36
ARTICLE 24	SEVERABILITY	36
ARTICLE 25	NOTICES	37
ARTICLE 26	MISCELLANEOUS PROVISIONS	38

FEB - 3 1995

CHANNEL COORDINATION
AND CHANNEL LEASE AGREEMENT

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

On this 19th day of December, 1994, Trans Video Communications, Inc. ("TVC"), a not-for-profit corporation affiliated with The Roman Catholic Diocese of Brooklyn, New York (the "Diocese") and CAI WIRELESS SYSTEMS, INC. (hereinafter referred to as CAI) duly organized under the laws of the State of Connecticut, enter into this Channel Coordination and Channel Lease Agreement ("Agreement")

RECITALS

WHEREAS, TVC is the licensee of Instructional Television Fixed Service ("ITFS") Stations, KNZ-69 at Bishop Ford High School, Brooklyn, New York, KNZ70 at the Mary Louis Academy, Jamaica Estates, Queens, New York KZE-20 at Lefrak Plaza, Queens, New York KVS-31 at St. Cecelia's Roman Catholic Church, Greenpoint, New York, and WHR-691 at Confucius Plaza, Chinatown, New York. TVC operates its present ITFS system using B and F Group Channels, assigned to various parts of the New York City, Metropolitan area (hereinafter referred to as the Metropolitan Area). KNZ-69, KZE-20 and WHR-691 operate on the ITFS B Group Channels. KNZ-70 and KVS-31 operate on the ITFS F Group Channels. TVC'S current system has excess capacity that it wishes to lease. Furthermore, by modernizing its facilities, TVC can increase its stations' capacity.

WHEREAS, the Federal Communications Commission ("FCC") has authorized licensees of Instructional Television Fixed Service ("ITFS") channels to lease excess capacity for non-ITFS uses, and

WHEREAS, CAI is in the business of providing channels for the distribution of television programming via microwave transmission and is desirous of leasing excess ITFS capacity in accordance with the rules, regulations and policies of the FCC, and TVC'S educational programming and CAI'S entertainment programming will be mutually advantageous and provide a significant benefit to the general public and to the educational institutions served by TVC.

WHEREAS, TVC has determined that there is excess capacity available on its ITFS Channels and that this excess capacity is available for entertainment or other commercial programming. TVC has further determined that, by permitting CAI to transmit entertainment programming on TVC'S ITFS channels, a significant increase may be achieved in the number of persons who will have access to TVC'S educational programming at little or no additional cost.

THEREFORE, in consideration of the mutual promises, conditions and obligations contained in this Agreement and for other good and valuable consideration, the parties agree as follows:

ARTICLE I
TERM

1.1 Subject to the provisions for termination set forth in Section 17 herein, the term of this Agreement shall commence upon the date of its execution and shall continue for a period of ten (10) years from the START DATE as defined in Section 10.2 subject to the FCC'S grant of TVC'S application for renewal of each station's license. The foregoing period is referred to herein as the "Initial Term".

1.2 Twelve (12) months before the expiration of the Initial Term, CAI and TVC shall meet to negotiate on an exclusive basis the terms of one or more additional Terms not to exceed ten (10) years ("Additional Renewal(s)"). If after the first three (3) months of the above-described twelve month period the parties have been unable to execute an agreement for one or more Additional Renewals, TVC shall be entitled to negotiate on a non-exclusive basis with other parties for a lease of its excess capacity on its ITFS Channels.

ARTICLE 2
RIGHT OF FIRST REFUSAL

2.1 If parties hereto are unable to reach an agreement to renew this lease after the Initial Term, CAI shall have a right of first refusal to match any offer which contemplates the lease of excess capacity on TVC'S channels for a period ending twelve (12) months from the end of the initial term, provided that CAI has complied with all of its obligations under this Agreement during

the Initial Term and further provided that such other lease offer is acceptable to TVC.

2.2 If TVC receives a bona fide offer to lease or otherwise use the Leased Channels from a third party, and if TVC proposes to accept said offer, TVC shall give CAI written notice thereof together with a copy of the proposed lease for purposes of providing CAI with a fifteen (15) Business Days Right of First Refusal. Notwithstanding TVC'S obligation to forward a copy of such proposed lease, non-substantive changes in the proposed lease may be made after giving CAI notice as set forth herein, without requiring a new period for the right of first refusal to be extended to CAI.

2.3 If CAI delivers to TVC written notice within fifteen (15) business days of receipt of the proposed lease that CAI elects to renew this Agreement upon the same terms and rental set forth in the proposed lease, such agreement to renew shall immediately become binding upon CAI and TVC. The parties shall thereafter sign and exchange copies of a renewal of this Agreement, with the renewal commencing upon the expiration of the term of this Agreement then in effect. If CAI declines to match the third party offer or fails to notify TVC within the above stated fifteen (15) business day period that it is exercising its right of first refusal then TVC may accept the offer to lease channels from the third party. If said fifteen (15) business day period expires on either a Saturday or Sunday, then it shall be deemed extended to next business day of TVC. If TVC fails to enter into a binding

Agreement with the third party on essentially the same terms and conditions as were offered to CAI within ninety (90) days after CAI'S right of first refusal exercise period expires, CAI'S right of first refusal shall be reinstated. If TVC enters into a bona fide contract with a third party, CAI'S right of first refusal shall be terminated.

2.4 TVC may not propose to accept an offer that is not bona fide.

2.5 For the purposes of this Agreement, "third party" refers to any party other than CAI, TVC, the Diocese or any affiliated person or entity.

2.6 In the event a third party offer did not include like terms and CAI exercises its right of first refusal the aforementioned right of First Refusal terms of this agreement shall be deemed and included in any offer of a third party.

2.7 For the purposes of this Section, TVC shall have no obligation to negotiate with or accept an offer from any party if TVC decides in its sole discretion to discontinue the leasing of excess capacity on its ITFS facilities. If TVC decides at the end of any initial or renewal terms to discontinue the leasing of its ITFS channels, TVC shall not use the channels itself for commercial purposes, except for educational and pastoral programming, or lease channel capacity to a third party for use of the third party for commercial purposes for a term of two (2) years after the expiration of this Agreement.

ARTICLE 3
LEASED CHANNELS

3.1 Upon execution of this Agreement, CAI shall have the right to use TVC'S excess channel time, as set forth in paragraph 3.2 on TVC'S ITFS Channels. Specifically exempt from excess channel capacity are analog channels B-1 and F-1 or their digital equivalent (Prayer Channel) if the channels are converted to digital and sufficient time on the other channels to serve hospital/nursing homes (Hospital Services), to wit: approximately fifteen (15) hours per month. Also included in the exemption are the ITFS response channels. Each of the leased channels include the main video channel and all sub-carriers and vertical blanking intervals (VBI).

3.2 CAI shall be entitled to transmit programming over the Leased Excess Channel Time: (i) on a full time basis (24 hours a day) on Saturdays and Sundays during school time from September through June and everyday during July and August; and (ii) on a part time basis (4:00 p.m.-8:00 a.m.) on all other days with the exception of specific holy days, special occasions when TVC notifies CAI at least thirty (30) days in advance, or other times mutually agreed upon by the parties; provided, however, that with the consent of both parties channel loading and or channel mapping may be employed.

3.3 TVC retains the exclusive right to: (A) all time on the Leased Channels other than air time leased in paragraph 3.2, and (B) such additional (recaptured) time as may be required to comply with the rules, regulations and policies of the FCC as they may exist and be amended from time to time. It is specifically understood that times other than as set forth in Paragraph 3.2 are deemed not to be excess air time. If the FCC or TVC requires the recapture of time from that which is leased to CAI, as specified in Section 3.2, there shall be a pro rata reduction in the Annual Minimum payments.

3.4 CAI will receive all TVC programming directly from TVC'S studios. TVC will staff, operate and control its studio and may change its programming at any time at its option. During TVC Capacity, CAI will transmit whatever programming is sent to it by TVC and will not edit or alter that programming. TVC will retain control over the airing of its programming and the flexibility to change the content of that programming as it deems appropriate. CAI may not use any time specified herein as TVC Capacity without the express consent of TVC.

ARTICLE 4 SIGNAL COMPRESSION

4.1 If and when digital compression technology becomes technically and economically feasible as measured, among other ways, by the extent to which other wireless cable operators are installing such technology, and to the extent permitted by the FCC and with the prior written consent of TVC, (such consent not to be unreasonably withheld) and so long as it does not result in the

disruption of or interference with TVC'S programming except to the extent approved by TVC. TVC and CAI hereby agree to employ digital compression technology in the dissemination of TVC'S and CAI'S programming over the ITFS Channels; provided, however, that if CAI employs digital compression technology, CAI shall not be required to convert all of TVC'S Channels to digital channels simultaneously, but if CAI converts any of TVC'S channels used for educational programming it will provide no less than four (4) digital channels for TVC'S educational programming. Each of TVC'S receive sites will be equipped and maintained by CAI, at its sole expense, so as to permit TVC, upon expiration or termination of this Agreement, to continue to provide service to its receive sites on the ITFS Channels by means of the digital compression technology then being used.

4.2 CAI will pay all costs of equipping and modifying TVC'S then-operational ITFS receive sites to enable such sites to receive the digital compressed channels. CAI'S obligations under this provision extend only to Diocesan receive sites.

4.3. The transmitter(s) for the digital compressed channels shall be purchased (subject to TVC'S approval of the equipment model which approval shall not be unreasonably withheld) and maintained by CAI, subject to the supervision of TVC, and leased to TVC for one (\$1.00) dollar per year during the term of this Agreement or any subsequent renewal periods. Upon the termination of this Agreement between CAI and TVC, TVC shall have the right to purchase said transmitter(s) as set forth in Paragraph 7.2. Said

transmitter(s) shall be deemed "Leased Equipment".

4.4 TVC shall have the option to purchase such Leased Equipment as set forth in Paragraph 7.2.

4.5 The term digital compression refers to the technology for distributing more than one (1) video and audio signal without material degradation over the 6 MHz of bandwidth normally required for one video and audio signal, or any other similar technology.

4.6 Upon termination of this Agreement, or any renewal terms thereafter, any channels created as a result of digital compression shall remain the property of TVC subject to the rules and regulations of the FCC.

4.7 In the event CAI, with the cooperation of TVC, replaces analog equipment with digital compression equipment TVC shall have the exclusive use of the Channels as set forth in 10.3. CAI shall have the exclusive use of seventy-five (75%) percent of all additional channels created by digital compression on a full time, every day basis. Original Channels shall not be deemed additional Channels.

ARTICLE 5 TRANSMISSION AND RECEIVE FACILITIES

5.1 In the event that TVC and CAI, in consultation with each other, mutually decide that it would be beneficial to modify TVC'S transmission facilities from those currently authorized by the FCC, all legal, technical, equipment, personnel and other expenses associated with licensing and implementation of the modification of TVC'S facilities shall be borne by CAI from the date of the

execution of this Agreement until the expiration of the term of this Agreement or its rightful termination by CAI. The modification of TVC'S facilities shall be subject to the supervision to TVC.

5.2 Regardless of whether or not TVC'S transmission facilities are modified, CAI also agrees to purchase and install and maintain at its expense, in consultation with TVC, equipment to enable TVC to transmit its programming to up to an additional thirty (30) receive locations identified by TVC in writing for the receipt of TVC'S ITFS programming. CAI at its expense, where necessary to permit reception of the ITFS Channels, will reorient and retrofit the ITFS equipment at TVC'S then-existing receive sites. TVC shall have the right to approve in consultation with CAI, ~~the receive equipment models to be installed with the TVC~~ stations, which approval shall not be unreasonably withheld.

5.3 In addition, CAI agrees that any and all receivers it installs for subscribers to its system shall be capable of receiving TVC'S programming at no cost to TVC.

5.4 TVC, with the technical assistance of CAI, and at CAI'S expense, shall file appropriate applications with the FCC to secure whatever modification to its construction permits and subsequent licenses both parties shall deem appropriate after good faith consultation with each other; provided, however, that CAI must provide TVC with the engineering section of any such application for TVC'S review at least thirty (30) days in advance of filing and pay any FCC filing fees and after school hours.

5.5 Both parties recognize that the overwhelming majority of TVC'S receive sites consist of schools. Both parties will cooperate in the reorientation to cause the least disruption of service. CAI commits to reorient the Diocesan receive sites during the regularly scheduled vacations (Christmas, Energy Week, Easter Week and Summer) and weekends and after school hours.

5.6 CAI, or its designee, shall purchase and install and maintain at its own expense (subject to TVC'S supervision and periodic inspection) any equipment, including but not limited to transmitters, transmission line, antennas, receivers and studio-to-transmitter links as are required to operate or upgrade the ITFS facilities in accordance with the provisions of TVC'S existing or modified FCC authorizations. TVC shall have the right to approve, in consultation with CAI, the equipment models to be installed with the TVC stations, which approval shall not be unreasonably withheld. Any equipment so purchased and installed by CAI shall be deemed Leased Equipment for purposes of Article 7 herein. CAI, or its designee, shall retain title to the Leased Equipment, which may be pledged as security for a loan by CAI, during the term of this Agreement, and removed by CAI, or its designee, upon the termination of this Agreement, subject to TVC'S right to purchase the Leased Equipment as set forth in Paragraph 7.2 of this Agreement. Leased Equipment must be of a type which is easily removable and not affixed so as to become a fixture to real property.

5.7 Operation of ITFS Facilities: CAI shall, on a date no

later than thirty (30) days after the first grant date of any modified FCC authorizations applied for under this Agreement, supply at its sole cost and expense personnel to construct, operate and maintain the Leased Equipment. Said personnel shall insure that all operation of the Leased Equipment at all times complies with all applicable FCC rules subject to the supervision and directions of TVC. Such operations and maintenance activities shall be undertaken at such times as are consistent with the operating requirements of CAI'S business and TVC'S activities. CAI shall provide TVC with a designated point of contact and shall ensure that TVC is fully aware of CAI'S maintenance and operation activities. TVC and CAI each shall have access to the facilities at all times for the above purposes. CAI, at its own expense, may make alteration or install attachments to the Leased Equipment (including encoding and/or addressing equipment as may be reasonably required by the exigencies of its business from time to time, provided that such alterations and attachments do not violate any FCC rules and provided further that TVC'S prior consent (which shall not be unreasonably withheld) and any required FCC authorization have been obtained. CAI will install, operate and maintain the Leased Equipment in such a manner as to assure that the operation of the Leased Equipment does not create or increase interference with TVC'S program services nor reduce the coverage area of the ITFS Channels.

5.8 Scrambling of Signals: CAI may employ the use of scrambling equipment for its programming. Any scrambling equipment used by CAI (e.g., decoders) shall be programmed to allow CAI'S subscribers to receive all of TVC'S programming, if TVC so desires, and such equipment shall be addressable to allow TVC to deny parts of its programming to selected subscribers. The scrambling equipment described in this paragraph shall be made available to TVC'S subscribers at CAI'S cost.

In the event that CAI or TVC determines that it is desirable to also have TVC'S programming scrambled, CAI shall supply, install and maintain decoders, etc., without cost to TVC, at the then current receive sites of TVC to enable such sets to receive TVC'S programming. In the event of digital compression, it is understood that decoders are to be placed in each classroom of the Schools serviced by TVC. Seventy (70) schools, designated by TVC, shall be installed in the first year and one-half (1/2) of the remaining schools in each of the next two (2) years (second and third years).

5.9 It is understood that CAI hereby commits itself to designing and operating a viable technical plan for Brooklyn and Queens that it will put into effect even if CAI does not win the Microband auction. The plan must be acceptable to TVC; provided, however, TVC shall not reject the plan solely on the basis that only TVC Channels are included in the plan. If CAI does not provide such a plan, TVC has a right on thirty (30) days notice to terminate this Agreement.

ARTICLE 6
NEW TRANSMISSION POINT

6.1 CAI shall have the right to require TVC to relocate its channels to a mutually agreed upon high roof top location in Manhattan (New Transmission Point or "NTP"). TVC will have the right to approve any such new location which approval shall not be unreasonably withheld. It is understood that the purpose of a NTP is to improve service for instructional and commercial purposes. In this regard CAI and TVC shall consult with each other pertaining to the relocation of the channels. CAI shall bear all expenses for filing the necessary applications at the FCC for such relocation. Both parties agree that any such move will take place at a time that will not cause a disruption on the TVC'S ITFS facilities providing service to the schools and its other receiver sets. If the TVC ITFS facilities are moved to a new location, CAI will pay the costs of any relocation, including the cost of required equipment and reorientation to TVC'S receive sties.

6.2. The new transmission facilities will consist of the transmitters, antennas and associate equipment necessary to transmit the full complement of B and F channels subject to FCC approval.

6.3. CAI will be responsible for purchasing, and maintaining (subject to the supervision and periodic inspection by TVC) TVC'S channel Transmitter and Associate Equipment (the "TVC ITFS facilities"), except as specifically provided elsewhere in this Agreement. Equipment purchased for TVC facilities must be approved by TVC which consent shall not be unreasonably withheld. Said

equipment shall be leased to TVC for One (\$1.00) Dollar per year and subject to purchase as Leased Equipment pursuant to Paragraph 7.2. .

6.4 CAI will pay all costs incurred by TVC (including reasonable legal, engineering and installation costs) in moving TVC'S facilities to the NTP.

6.5 CAI will be solely responsible for the acquisition and installation of equipment needed for TVC to establish a studio-transmitter link ("STL") or optic fiber link between TVC'S transmit facilities (currently Bishop Ford High School) and the NTP subject to the approval of TVC which approval shall not be unreasonably withheld. TVC will hold title to the STL Equipment and will be the licensee of the facility.

6.6 CAI will pay for the costs of all necessary relocation, reorientation or re-engineering of TVC'S then current receive sites required by the move to the NTP. All of this work shall be subject to FCC approval, if necessary. This responsibility includes but is not limited to the reorienting of receiving antennas, changing of down converters, and changing of towers. CAI shall obtain a twenty-one (21) dbmv signal level at the output of the power supply of the downconverter at TVC'S receive sites.

6.7 TVC and CAI pledge their best efforts in effecting said move to a NTP. Each agrees to share engineering analyses of equipment and marketing effects of different equipment before deciding what equipment to purchase. TVC shall have ultimate responsibility to decide the course of action in all matters

relating to any FCC applications for relocation to the NTP. In order to monitor the quality and reliability of transmission service, both TVC and CAI shall share data from their field testing at home receiving sites and other relevant engineering information.

6.8 CAI shall have the sole responsibility to provide engineering to insure that neither the ITFS nor the MMDS facilities at the NTP, as constructed, generate adjacent or co-channel interference to neighboring facilities that is unacceptable under FCC rules. Neighboring facilities include but are not limited to the following: Trenton, N.J. (F-3); The Roman Catholic Archdiocese of New York (A1-4, E1-4); The Roman Catholic Diocese of Rockville Center, on Long Island, N.Y. (A1-4, B1-4m E1-4); Plainview School District, Long Island N.Y. (B1-4); Mercer County, New Jersey (B1-4).

6.9 Prior to preparation of any application to be filed at the FCC with respect to the TVC Stations, CAI shall provide to TVC a complete description of any engineering plan for the relocation of the stations to the NTP. This description shall include all information regarding the engineering plan for these stations which must be provide to the FCC in the applications, or such information as is otherwise agreed upon by the parties, as well as any information which is subject to approval by TVC pursuant to this Agreement. TVC shall inform CAI of any concerns and/or objections to such description within fourteen (14) calendar days of receipt of such. The parties shall continue to consult in good faith to develop the engineering plans for the TVC Stations during the

process of preparing the application or the TVC Stations to be filed at the FCC.

6.11 After relocating to the NTP, neither CAI nor TVC shall relocate the transmission point for its Channels without the express written consent of each other which consent shall not be unreasonable withheld.

ARTICLE 7 LEASED EQUIPMENT

7.1 TVC shall lease from CAI all equipment purchased and installed by CAI pursuant to the terms of this Agreement. The terms of the Lease Agreement shall also contain the following general provisions:

(a) RENT: TVC shall pay to CAI the total amount of One Dollar (\$1.00) per year for its use of the Leased Equipment. It being understood that TVC'S provision of the air time at the rates provided in this Agreement is full consideration for CAI'S Lease of Equipment to TVC;

(b) TAXES: CAI shall be required to pay all taxes and other charges assessed against the Leased Equipment, without cost to or reimbursement by TVC, and CAI shall be entitled to claim depreciation and investment tax credits thereunder for income tax purposes.

(c) CAI shall be required to bear all costs associated with maintaining and operating the Leased Equipment, and shall keep such equipment in good operating condition at all times during the Initial Term and any Additional Renewal(s).

(d) TERM: The term of the Lease shall commence upon the dates of installation of the transmission equipment and shall end upon the termination or non-renewal of this Agreement.

7.2 If this Agreement is terminated by reason of CAI'S material breach or default, TVC shall have the right to purchase the Leased Equipment for One Dollar (\$1.00) free of any pledge or other encumbrance of the Leased Equipment by CAI.

7.3 If TVC decides not to lease its channels at the conclusion of the term of this lease or any renewals thereof, TVC shall have the right to purchase the Leased Equipment for one-half(1/2) of its then current fair market value.

7.4 If TVC leases its channels to a third party at the conclusion of this lease term or any renewals thereof, it shall have the right to purchase the Leased Equipment at the then current fair market value.

7.5 In any event, said Leased Equipment shall be purchased free of any pledge or other encumbrance of the Leased Equipment by CAI. Any documents CAI executes pledging the Leased Equipment as security for a loan shall reflect the right of TVC to purchase the Leased Equipment free of any pledge or other encumbrance. All transactions necessary to transfer title in the Leased Equipment to TVC shall be completed within thirty (30) days of CAI'S receipt of written notice from TVC that TVC intends to purchase the Leased Equipment.

7.6 TVC shall have the right to file all necessary UCC (Uniform Commercial Codes) filings to protect its right of priority and right to purchase the aforementioned equipment to enable TVC to provide four (4) channels of programming. CAI shall cooperate in the preparation and execution of any documents necessary to achieve such UCC filings.

ARTICLE 8
REGULATORY COOPERATION

8.1 Both parties shall cooperate with one another and shall undertake all reasonable efforts necessary to secure the authorizations necessary to provide the services contemplated under this Agreement.

8.2 Each party shall be responsible for paying its own costs in securing said authorizations, except as set forth elsewhere in this Agreement.

ARTICLE 9
PERSONNEL

9.1 All personnel engaged by TVC or CAI to operate and maintain transmission facilities shall possess the appropriate technical qualifications required by the rules and regulations of the FCC. All operation of the transmission facilities shall be in accordance with applicable FCC rules and regulations and subject to the supervision of TVC.

9.2 TVC and CAI shall permit persons authorized by the other to have access to each of their facilities as may be required for the performance of this Agreement. All such persons when in such

facilities shall be under the ultimate direction and control of the party who is licensed by the FCC to operate the facility. Arrangements concerning access shall be made by mutual agreement of the general managers of TVC and CAI.

9.3 CAI and TVC recognize that each party is obligated to operate its facilities respectively, at all times in compliance with the rules, regulations and policies of the FCC and the requirements of the Federal Communications Act of 1934 as amended from time to time. To this end, CAI and TVC commit their best efforts to cooperate with each other so that each may ensure that their facilities meet their responsibility. Both agree not to take any actions that will interfere with the other's ability to comply with the rules, regulations and policies of the FCC and the Federal Communications Act of 1934 as amended from time to time. It being understood that this Agreement pertains only to the Leasing of TVC'S facilities.

ARTICLE 10
COMPENSATION FOR LEASE OF EXCESS CAPACITY

10.1 Upon execution of this Agreement, CAI agrees to pay TVC a non-refundable, signing royalty

Starting at the Sixty-First (61st) month from the Start Date, CAI'S payments shall be adjusted annually based on any increase in the Items, NYC Index of the Consumer Price Index ("CPI") from what the CPI was as of the Start Date. In the event any such payment is not made within said tenth (10th) day of each month, there shall be a three (3%) percent late penalty charged to CAI.

10.3 In the event that CAI implements digital compression technology, TVC shall have twenty-five (25%) percent of the total resulting channel capacity. TVC may utilize up to two (2) full time channels with the remainder divided into part time (8am-4pm) use. The per-subscriber royalty described in Paragraph 10.2 shall be adjusted as follows: if CAI compresses any IFTS Channel at a ratio of less than four (4) to one (1), for each digitally compressed channel CAI shall pay TVC a per subscriber, per month royalty equal to _____ of the per-subscriber

per month royalty then in effect under Paragraph 10.2. If CAI compresses any ITFS Channel at a ratio of four (4) or more to one, for each of the three (3) of every four (4) digitally compressed channels available to CAI for CAI'S exclusive use, CAI shall pay TVC a royalty equal to _____ of the per-subscriber, per month royalty then in effect. Any royalties paid pursuant to this Paragraph 10.3 shall be subject to the CPI

adjustment and monthly minimums set forth in Paragraph 10.2.

10.4 For purposes of computing the compensation due TVC pursuant to Paragraph 10.2 above, the average number of wireless cable subscribers for any month shall equal the number of wireless cable subscribers as of the last day of the prior month plus the number of wireless cable subscribers as of the last day of the current month divided by two, provided, however, that for purposes of first payment due under this contract, the number of wireless cable subscribers on the last day of the first month of the Initial Term shall form the basis for the computation. In those situations where programming is sold in bulk, i.e., where a number of viewing units are grouped for billing purposes, such as may be the case with hotels and condominiums, the number of equivalent wireless cable subscribers shall be determined by dividing the total monthly revenue derived from each such bulk billing unit by CAI'S then prevailing monthly rate applicable to an individual wireless cable subscriber in the Metropolitan Area who subscribes to the same channel package taken by the bulk billing unit.

10.5 CAI shall, along with each monthly payment, provide TVC with a certificate signed by an executive officer of CAI showing the average number of wireless cable subscribers served during said month, calculated as provided in Paragraph 10.4, together with other information reasonably requested by TVC. CAI shall not be liable for damages for any good faith mistake of fact with respect to such certificates, but such mistakes shall be corrected promptly and any compensation due TVC shall be adjusted accordingly.

10.6 In the event that the Initial Term commences on a day other than the first day of a calendar month, or this Agreement is terminated (for a reason not affecting TVC'S right to payment) on a day other than the last day of a calendar month, the subscriber fee or monthly minimum payment for that month shall be proportionately reduced.

10.7 At the option of TVC, and in lieu of the rental fee calculated on a per subscriber basis, TVC shall be paid of the CAI subsidiary that incorporates TVC'S Channels subject to the same monthly minimum and payment procedures.

10.8 All payments are due within ten (10) business days.

ARTICLE 11
RIGHT TO AUDIT RECORDS

11.1 CAI shall keep, maintain and preserve complete and accurate records and accounts, including all invoices, correspondence, ledgers, financial and other records, pertaining to TVC'S charges hereunder and such records and accounts shall be available for inspection and audit at CAI'S office once every six months during the term of this Agreement or within ninety (90) days thereafter, during reasonable business hours, by TVC or its agent. CAI shall in connection with any audit provide TVC or its agent with a copy of a current list of CAI'S subscribers. TVC'S exercise in whole or in part at any time or times of the right to audit CAI'S records or accounts or the acceptance by TVC of any statement or remittance tendered by CAI or on behalf of CAI shall be without prejudice to any other rights or remedies of TVC and shall not

preclude TVC thereafter from disputing the accuracy of any such statement or payment. In the event that any audit shall disclose a differential, discrepancy or underpayment of more than five (5%) percent, then in addition to the payment of the amount found to be due to TVC, CAI shall upon demand by TVC reimburse TVC for its costs of conducting the audit. All information obtained by TVC during said audit shall be maintained on a confidential basis.

11.2 For a period of forty-eight (48) months after the creation of books or records, CAI shall keep, maintain and preserve complete and accurate records and accounts, including all invoices, correspondence, ledgers, financial and other records, pertaining to TVC'S fees and rental hereunder.

ARTICLE 12 SECURITY DEPOSIT

12.1 If any part of a past due payment, including the penalty, remains unpaid after ten (10) days following CAI'S receipt or refusal of receipt of written notice from TVC demanding such payment, TVC may demand that CAI deliver to TVC a Letter of Credit payable to TVC, drawn on a bank with a banking office in New York City (a "New York City Bank"), in the amount of the payment and penalty then due. Said Letter of Credit shall be delivered to TVC within seven (7) business days of receipt by CAI of TVC'S demand. Said Letter of Credit is payable ninety (90) days after the date the payment was due. A similar procedure shall be used for any additional failures by CAI to make prompt payments.

12.2 Within one (1) year of the date of the execution of this Agreement, CAI shall deliver and deposit the sum of

into an account in a Commercial Bank authorized to do business in the State of New York for and as faithful performance of its obligation under this Agreement. Said monies in said account shall not be pledged, liened or in any other way encumbered whatsoever except for the benefit of TVC. TVC shall have the right to file the appropriate UCC (Uniform Commercial Code) filings to preserve its right of priority to these funds and CAI agrees to cooperate in the execution and filing of any such UCC filings. In the event of any material breach of this Agreement by CAI, not cured within one hundred twenty (120) days of notice of such and demand by TVC, CAI agrees to release from said bank account a sum of money sufficient to cure or pay for the cure of such default. CAI agrees to provide the necessary documentation and authorization to such commercial bank to enable it to release such funds to TVC upon demand of TVC and a representation to said Bank by TVC that TVC is entitled to said monies pursuant to the terms of this paragraph.

ARTICLE 13
CONTROL OVER PROGRAMMING

13.1 CAI intends that only programming of a sort which would not serve to place TVC'S reputation in the community or within the Roman Catholic Church in jeopardy will be transmitted by CAI on the leased channels. TVC and CAI agree that CAI shall have the right to market, as such programming currently exists, the programming of the networks listed hereto in Exhibit A. The parties recognize the difficulties inherent in specifying exact standards in this Paragraph, but believe that good faith efforts on both sides can

overcome whatever differences that may arise.

13.2 All program material transmitted by CAI on the Leased Channel Facilities shall be subject ultimately to the direct and complete control of TVC to the extent required to assure compliance with FCC rules, regulations and policies, and the Federal Communications Act of 1934 as amended from time to time, and with this Agreement.

13.3 TVC specifically reserves the absolute right, pursuant to the provisions set forth below, to refuse to transmit or permit to be transmitted any program on the Leased Channel Facilities that TVC in its sole discretion determines is pornographic, obscene, x-rated, or is scandalous to the Roman Catholic Church or Faith ("objectionable" programming).

13.4 No programming shall be transmitted on the Leased Channels which gives an endorsement by CAI of any candidate for an elective office of the United States, a state government or any other governmental body.

13.5 TVC'S failure to object to an initial transmission of objectionable programming shall not constitute a waiver of its right to refuse to retransmit the programming at a later time.

13.6 The parties shall cooperate to avoid TVC'S having to exercise its right to refuse transmission on the Leased Channels. The parties acknowledge that mutual cooperation of the parties is beneficial to each party.

13.7 For purposes of this Agreement, channels created by digital compression shall be deemed leased channels.

ARTICLE 14
PROGRAM REVIEW PROCEDURES

14.1 No less than thirty (30) days in advance of transmission for each calendar month, CAI will provide TVC with a schedule and synopsis of its proposed programming ("Program Information") on the Leased Channels. When this Program Information is not available to CAI in a timely fashion, CAI will provide such information as soon as it becomes available.

14.2 If the Program Information is provided to TVC thirty (30) days in advance, TVC shall notify CAI within fourteen (14) days of its receipt if TVC determines that any of the programming is objectionable.

14.3 If the Program Information is provided to TVC less than thirty (30) days in advance of the date of the intended transmission, TVC will notify CAI as soon as is reasonably practical whether or not the programming is objectionable. Nothing herein shall be deemed to require TVC'S preview of live or taped news or public affairs or other live material, but TVC reserves the right to preview programming to the extent reasonable and practical.

14.4 If the Program Information is not disclosed to TVC or is incorrect or incomplete, TVC shall not be required to give any advance notice to CAI before refusing to transmit the programming. TVC will, however, immediately notify CAI'S general manager of TVC'S refusal to transmit any programming.

14.5 TVC shall provide notice by telephoning CAI general

manager as soon as TVC decides that any programming is objectionable.

ARTICLE 15
PROMOTION, NAMES & SYMBOLS

15.1 CAI agrees to integrate TVC'S programming into the overall communications service offered to CAI'S subscribers, at TVC'S option, without cost charged to TVC. This integration shall include, but not be limited to, listing TVC'S material in any program guides distributed to subscribers, including in advertising and promotional material (including on-air promotions during Leased Time), and full attribution to TVC as the source of the material.

15.2 CAI shall not make use of the name or symbols of the Diocese in any manner whatsoever, nor shall it use any other names or symbols of The Roman Catholic Faith in connection with any of its programming or in any of its written or oral advertising, brochures, pamphlets, stationery, or other written matter, except with the prior written authorization of TVC. This provision does not refer to the broadcast of news programs. TVC will not unreasonably withhold such authorization.

ARTICLE 16
TRANSFER AND TERMINATION

16.1 This Agreement may be terminated by TVC or CAI upon thirty (30) days written notice to the other party (or earlier if ordered by the FCC) in the event that the FCC determines that TVC and/or CAI is not authorized to operate said channels as contemplated by this Agreement and reformation of this Agreement pursuant to Section 16 hereof is impractical or impossible. In

such instance, there shall be a final accounting of monies due under this Agreement, and when completed, there shall be no further liability of one party to the other provided that neither party is in Material Breach as defined in Paragraph 16.2 herein.

16.2 Should either party be in Material Breach of this Agreement for the non-performance of the obligations contained in this Agreement, this Agreement may be terminated by the non-defaulting party if such breach shall continue for a period of thirty (30) days following the receipt of written notice from the non-defaulting party. A Material Breach shall include, but not be limited to, failure of the CAI to construct, operate, and/or maintain TVC'S facilities as described in this Agreement in a timely manner, and failure of the TVC or CAI to comply with the rules, regulations, and policies of the FCC, including filing by TVC of all necessary applications and forms to maintain the FCC licenses for the ITFS channels provided that CAI has provided engineering materials as required elsewhere in this Agreement. Notwithstanding the foregoing, CAI'S failure to make any payment required under Paragraphs ten (10) or twelve (12) herein shall also constitute a Material Breach of this Agreement; and, where such failure continues for a period of ten (10) days after receipt or refusal of receipt of written notice thereof by CAI, by TVC may elect to cancel and terminate this Agreement; and provided further that if during a period of twelve (12) consecutive months, TVC has given CAI three (3) or more notices of failure to make such payments, TVC shall thereafter be relieved of the obligation to

give notice of any further failure to make payment and may declare a default upon failure of CAI to make any payment hereunder and immediately terminate this Agreement.

16.3 Provided CAI continues to make the monthly payments set forth in Article 10, CAI shall make for a period of nine (9) months after a material breach by it good faith efforts to find a substitute Lessee willing to assume all of CAI'S rights, duties and obligations under this Agreement. If after the above-described nine (9) month period (during which CAI shall remain obligated under this Agreement) CAI locates a successor willing to assume all of the rights, duties and obligations under this Agreement, CAI may assign all of its rights, duties and obligations under this Agreement to such substitute Lessee with the prior written consent of TVC. Notwithstanding the foregoing, TVC shall have the right to reject any successor to CAI which in its sole and absolute discretion does not in TVC'S sole judgement have adequate financial, technical or character qualifications. If CAI is unable within the aforementioned nine-month period to locate a substitute Lessee who is willing to assume all of the rights, duties and obligations of CAI under this Agreement and who is acceptable to TVC, CAI may terminate this Agreement. If CAI terminates this Agreement pursuant to this Paragraph 16.3, CAI shall pay to TVC, as liquidated damages, a termination payment equal to

In addition, TVC shall have the right to acquire the Leased Equipment pursuant to the provisions of Paragraph 7.2 and/or require CAI to operate and

maintain TVC'S ITFS transmission facilities, including the Leased Equipment, for the remainder of the term of this Agreement in accordance with the provisions of this Agreement; provided, however, that if TVC enters into an excess capacity lease agreement for the ITFS Channels at any time during the remainder of the term of this Agreement, CAI'S obligation to maintain the operation of TVC'S ITFS transmission facilities shall cease. Under such circumstances, however, TVC shall still retain the right to acquire the Leased Equipment from CAI in accordance with the provision of Paragraph 7.2.

16.4 During the term of this Agreement and any renewal thereof, CAI will be solely responsible for obtaining and paying for rooftop leases and equipment room leases at the NTP for TVC'S facilities. The rooftop and equipment room leases for the TVC facilities will be in the name of CAI and will provide, subject to the ability to obtain such terms from the lessor of the NTP, that if TVC terminates this Agreement due to CAI'S material breach of this Agreement that TVC shall have the right to lease space for the equipment necessary for TVC'S programs; and further that said lease for TVC shall be for a term of five (5) years with the rent prepaid by CAI. Said lease terms for TVC shall also provide that it shall have the right to cancel such lease upon three (3) months written notice to the NTP.

ARTICLE 17 BINDING ARBITRATION

17.1 If the parties cannot agree upon the fair market value of the Leased Equipment or the number of CAI'S subscribers pursuant

to any provision of this Agreement, the parties shall submit the dispute to a mutually acceptable certified public accountant or such other person as may be agreed to by the parties, whose decision shall be deemed binding and non-appealable. Costs associated with the use of said certified public accountant shall be borne equally by TVC and CAI. The procedures described herein shall not affect CAI'S obligation to transfer title to the Leased Equipment to TVC within the time period set forth in Paragraph 7.2 of this Agreement.

17.2 This Arbitration clause is a limited Arbitration clause. It is expressly limited to disputes regarding the fair market value of Leased Equipment and the number of CAI subscribers. It is not applicable to any other issues whether expressly or not expressly listed in Article 16.

ARTICLE 18 ASSIGNMENT AND SUBLEASING

18.1 Except as provided in Paragraph 16 above, and except with respect to CAI'S right to pledge the Leased Equipment as security for a loan, neither CAI nor TVC may terminate, assign, sublease or transfer its rights, benefits, duties or obligations under this Agreement without the prior written consent of the other which consent shall be in the sole and absolute discretion of the other party, provided, however, that, upon prior written notification to the other party, either party may freely assign its rights and obligations under this Agreement to a wholly-owned subsidiary or controlled affiliate without the prior written

consent of the other. Any assignment, sublease or transfer not in accordance with this paragraph shall be deemed null and void.

ARTICLE 19
INDEMNIFICATION AND HOLD HARMLESS

19.1 Each party will indemnify, defend and hold the other free and harmless, of from and against any and all claims, liability, loss or damage whatsoever on account of any loss, injury, libel, slander, death or damage arising in any way out of the acts, omissions, commissions or negligence of the other party.

19.2 Throughout the term of this Agreement, CAI shall maintain insurance coverage with financially reputable insurers in an amount adequate to cover its risks under this Agreement, but in no event less than Two Million (\$2,000,000.00) and 00/100 Dollars including insurance against property damage, public liability, and any other liabilities arising out of the operation of CAI'S program service on the ITFS Channels, including but not limited to claims based on patent and copyright infringement, defamation, invasion of privacy and other infringements of rights. TVC shall be named as an additional insured on all of such policies and CAI shall provide TVC from time to time with certificates of such insurance and evidence that the premiums therefore have been paid.

ARTICLE 20
FORCE MAJEURE

20.1 Notwithstanding anything contained in this Agreement to the contrary, neither party shall be liable to the other for failure to perform any obligation under this Agreement (nor shall

any charges or payments be made in respect thereof) if prevented from doing so by reason of fires, embargoes, civil commotion, rationing, or other orders or requirements, acts of civil or military authorities, acts of God or other contingencies beyond the reasonable control of the parties, including, but not limited to the adoption of a Federal or State law or action of any Federal or State oversight agency, including the FCC, which prevents TVC or CAI from performing under this Agreement, and all requirements as to notice and other performance required hereunder within a specified period shall be automatically extended to accommodate the period of dependency of any such contingency which shall interfere with such performance.

ARTICLE 21
SPECIFIC PERFORMANCE

21.1 The parties acknowledge and agree that the rights reserved to CAI and to TVC hereunder are necessarily of a special, unique, unusual, and extraordinary character, which gives them a peculiar value, the loss of which cannot be adequately or reasonably compensated for in damages or in an action at law, and the breach by either party of any of the provisions of this Agreement will cause the other party irreparable injury and damage. In such event, the non-defaulting party shall be entitled, as a matter of right, without further notice, to require of the other party specific performance of all of the acts, services, and undertakings required hereunder, including the obtaining and undertaking of all requisite authorizations to execute or perform this Agreement and to obtain injunctive and other equitable relief

in any competent court to prevent the violation or threatened violation of any of the provisions of this Agreement, provided, however, that neither party shall be required to perform in a manner that would violate any FCC or other governmental law, rule, or policy. Neither this provision nor any exercise by CAI or TVC of their rights to equitable relief or specific performance herein granted shall constitute a waiver by either party of any other rights which it may have to damages or otherwise. In the event that CAI is able to obtain specific performance as specified under this Article 21, such specific performance shall be its sole remedy.

ARTICLE 22 INSURANCE

22.1 Each party shall maintain libel and slander insurance in an amount which is customary (similar to cable) for their respective services (MMDS for CAI and ITFS for TVC).

ARTICLE 23 BINDING EFFECT

23.1 This Agreement shall bind and inure to the benefit of the parties and their successors in interest and permitted assigns.

ARTICLE 24 SEVERABILITY

24.1 If any part of this Agreement is determined to be in violation of any applicable law, rule or regulation, the remainder of this Agreement shall continue in full force and effect, provided that the obligations and benefits of the parties hereunder are not materially changed.

ARTICLE 25
NOTICES

25. 1 Unless specifically noted to the contrary, all notices shall be sent by hand or by express delivery, return receipt requested. Notice shall be effective upon receipt or refusal of receipt.

Notice to TVC must be sent to:

Reverend Monsignor Michael J. Dempsey
Executive Director
Trans Video Communications, Inc.
1712 Tenth Avenue
Brooklyn, New York 11215
(718) 499-9705

With a copy to:

HURLEY, KEARNEY & LANE, ESQ.
32 Court Street
Brooklyn, New York 11201
Attn: Richard J. Cea, Esq.
(718) 852-5900

and

Vicar of Administration of the Roman
Catholic Diocese of Brooklyn, New York
P.O. Box C
75 Greene Avenue
Brooklyn, New York 11202

Notice to CAI must be sent:

Mr. Timothy Sentora
CAI Wireless Systems, Inc.
12 Corporate Woods Boulevard
Suite 102
Albany, New York 12211

With a copy to:

GERALD STEVENS-KITTNER, ESQ.
ARTER & HADDEN
1801 K Street, N.W.
Suite 400K
Washington, D.C. 20006

ARTICLE 26
MISCELLANEOUS PROVISIONS

26.1 Entire Agreement: This Agreement constitutes the entire Agreement between the parties and supersedes all prior oral or written provisions of any kind. The parties further agree that this Agreement may only be modified by written Agreement signed by both parties.

26.2 DEADLINES WITH THIRD PARTIES: Neither party is, and neither party shall hold itself out to be, vested with any power or right to contractually bind, act on behalf of the other as its contracting broker, agent or otherwise for committing, selling, conveying or transferring any of the other party's assets or property, contacting for or in the name of the other party, or making any contractually binding representations on behalf of the other party. Without limiting the foregoing, in no event shall CAI be identified as the licensee of the ITFS Channels or shall TVC be held out as the programmer of the Leased Time programmed by CAI.

Nothing in this Agreement shall be deemed to create a partnership or joint venture of any kind between the parties.

26.3 Headings: The paragraph headings are for the convenience of the parties and in no way alter, modify, amend, limit or restrict the contractual obligations of the parties.

26.4 Counterparts: This Agreement may be signed in any number or counterparts with the same effect as if the signature on each copy appeared on the other.

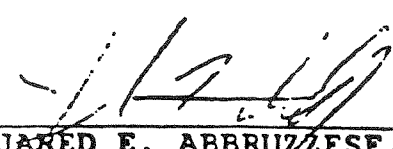
26.5 Jurisdiction: This Agreement shall be governed by the laws of the State of New York except where Federal Law supersedes State Law.

ACCORDINGLY, THE PARTIES HEREBY EXECUTE THIS AGREEMENT ON THE FIRST DATE SET FORTH ABOVE.

TRANS VIDEO COMMUNICATIONS, INC.

BY: 
REV. MSGR. MICHAEL J. DEMPSEY
EXECUTIVE DIRECTOR

CAI WIRELESS SYSTEMS, INC.

BY: 
MR. JARED E. ABBRUZZESE,
PRESIDENT